

**DOCUMENTATION OF THE
DETAIL NATALITY TAPE FILE FOR
1999 DATA**

SPECIAL NOTICE

**EFFECTIVE WITH 1998 DATA THE COMMONWEALTH
OF THE NORTHERN MARIANA ISLANDS RECORDS
ARE INCLUDED IN THE TERRITORIES PUBLIC-USE
FILE.**

Public Use Data Tape Documentation - Natality Detail 1999 Data

This tape documentation was prepared in the Division of Vital Statistics. Manju Sharma of the Systems, Programming, and Statistical Resources Branch was responsible for developing the natality documentation and for providing all of the computer programming services necessary to keep it up-to-date.

Melissa Park of the Reproductive Statistics Branch prepared the Technical Appendix. The Registration Methods Section and the Data Acquisition and Evaluation Branch provided consultation to State Vital Statistics offices regarding collection of birth certificate data.

Questions on the documentation or general questions concerning the natality file should be directed to the Systems, Programming, and Statistical Resources Branch, Division of Vital Statistics, NCHS, 6525 Belcrest Road, Room 840, Hyattsville, MD 20782-2003 (301-458-4777).

Questions concerning the Technical Appendix or substantive questions concerning the natality data should be directed to the Reproductive Statistics Branch, Division of Vital Statistics, NCHS, 6525 Belcrest Road, Room 820, Hyattsville, MD 20782-2003 (301-458-4111).

Documentation of the Detail Natality Data File for 1999 Data

Since 1985 natality statistics for all States and the District of Columbia have been based on information from the total file of records. The information is received on computer data tapes coded by the States and provided to the National Center for Health Statistics (NCHS) through the Vital Statistics Cooperative Program. NCHS receives the data for this file from the registration offices of all States, the District of Columbia, and New York City. Natality data for Puerto Rico, Virgin Islands, Guam, American Samoa and the Commonwealth of the Northern Mariana Islands (referred to as Northern Marianas) are included as separate data-set in the public-use file.

Natality data for the United States are limited to births occurring within the United States to U.S. residents and nonresidents. Births to nonresidents of the United States are excluded from all tabulations by place of residence. Births occurring to U.S. citizens outside the United States are not included in this file. Natality data for Puerto Rico, Virgin Islands, Guam, American Samoa and Northern Marianas are limited to births occurring within the respective territories.

Effective January 1, 1989, a revised U.S. Standard Certificate of Live Birth replaced the 1978 revision. The 1989 revision provides a wide variety of new information on maternal and infant health characteristics, representing a significant departure from previous versions in both content and format. For a more detailed discussion of the revised and new items refer to the technical appendix part of this document.

The Office of Management and Budget revised its designation of metropolitan statistical areas based on figures from the 1990 Census. Effective with the 1990 data file, NCHS has been using these new definitions and codes as indicated in the listing of 320 Metropolitan Statistical Areas (MSA's), Primary Metropolitan Statistical Areas (PMSA's), and New England County Metropolitan Areas (NECMA'S) included in this documentation. There are also 20 Consolidated Metropolitan Statistical Areas (CMSA's), which are made up of PMSA's. Because other geographic changes based on 1990 Census became effective with 1994 data file, the metropolitan statistical area destination were updated as well. Effective with the 1994 data-file there are 311 MSA's, PMSA's, and NECMA'S and 18 CMSA's as indicated in the listing included in this documentation.

NCHS has adopted a new policy on release of vital statistics unit record data files. This new policy was implemented for the 1989 vital event files to prevent the inadvertent disclosure of individuals and institutions. As a result, the files for 1989 and later years do not contain the actual day of the birth or the dates of birth of the mother or father. The geographic detail is also restricted; only counties and cities of 100,000 or more population based on the 1990 Census, as well as metropolitan areas of 100,000 or more population based on the 1990 Census, are identified.

Included in this document are:

1. List of data elements and tape locations.
2. Machine/File/Data Characteristics.
3. Detail Record Layout.
4. Geographic Code Outline.
5. Metropolitan Statistical Areas as adapted for use by NCHS/DVS.
6. Technical Appendix.
7. Table 1. Counts of Births by occurrence and residence for each State
8. Report of Final Natality Statistics, 1999

SYMBOLS USED IN TABLES

Symbol	Explanation
---	Data not available
...	Category not applicable
-	Quantity zero
0.0	Quantity more than 0 but less than 0.05
*	Figure does not meet standards of reliability or precision

List of Data Elements and Tape Locations

<u>Data Items</u>	<u>Locations</u>
1. General	
a. Data year	1-4
b. Record type	5
c. Resident status	6
2. Occurrence	
a. NCHS State	16-17
b. Expanded NCHS State	14-15
c. NCHS County	18-20
d. Population size - county	26
e. Division	12
f. Region	11
g. FIPS State	21-22
h. FIPS County	23-25
3. Residence	
a. NCHS State	32-33
b. Expanded NCHS State	30-31
c. NCHS County	34-36
d. NCHS City	37-39
e. Population size - city	40
f. Population size - county	58
g. NCHS PSMA/MSA	347-349
h. Met/Nonmet county	41
I. Division	28
j. Region	27
k. FIPS State	42-43
l. FIPS County	44-46
m. FIPS Place	47-51
n. CMSA	52-53
o. FIPS PSMA/MSA	54-57
4. Prenatal Care	
a. Month began	106-109
b. Number of visits	110-113
c. Adequacy of care recode	93
5. Child	
a. Sex	188-189
b. Number at delivery	201
c. Birthweight	193-199
d. Apgar score	205-207
e. Gestation	181-187,208-209
f. Month/year of birth	172-173,176-179

g. Day of week of birth

180

List of Data Elements and Tape Locations

<u>Data Items</u>	<u>Locations</u>
6. Mother	
a. Age	68-76,91-92
b. Race	79-82
c. Marital status	86-87
d. Education	83-85
e. Place of birth	88-90
f. Hispanic origin	77-78
7. Pregnancy History	
a. Born alive, now living	94-95
b. Born alive, now dead	96-97
c. Other terminations	98-99
d. Total birth order	103-105
e. Live birth order	100-102
8. Father	
a. Age	154-157,166-167
b. Race	160-162
c. Hispanic origin	158-159
9. Other Items	
a. Residence reporting flags	307-326
b. Attendant at birth	10
c. Place of delivery	8-9
d. Interval since last live birth	128-132
10. Medical and Health Data	
a. Method of delivery	217-222,224
b. Medical risk factors	225-241
c. Other risk factors	
Tobacco	242-245
Alcohol	246-249
Weight gain during pregnancy	250-252
d. Obstetric procedures	253-259
e. Complications of labor and/or delivery	260-275
f. Abnormal conditions of the newborn	276-284
g. Congenital anomalies	285-306

Machine/File/Data Characteristics:

ALL DATA SETS:

1.	Machine used:	IBM/3081/K
2.	Language used:	PL/I
3.	File organization:	One file, multiple reels
4.	Record format:	Blocked, fixed format
5.	Record mode:	IBM/EBCDIC 8-bit code
6.	Code scheme:	Numeric/Alphabetic/Blanks
7.	Last block:	May be a short block
8.	Record length:	350
9.	Blocksize:	32550

U.S. DATA SET:

1.	Record count:	
2.	Data counts:	ALL BIRTHS:
	a.	By occurrence: 3,963,465
	b.	By residence: 3,959,417
	c.	To foreign residents: 4,048

PUERTO RICO, VIRGIN ISLANDS, GUAM, AMERICAN SAMOA, AND NORTHERN MARIANAS DATA SET

1.	Record count:	68,613
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PUERTO RICO:

2.	Data counts:	ALL BIRTHS:
	a.	By occurrence: 59,684
	b.	By residence: 59,563

VIRGIN ISLANDS:

1.	Record count:	
2.	Data counts:	ALL BIRTHS:
	a.	By occurrence: 1,772
	b.	By residence: 1,671

GUAM:

1.	Record count:	
2.	Data counts:	ALL BIRTHS:
	a.	By occurrence: 4,037
	b.	By residence: 4,021

AMERICAN SAMOA:

1.	Record count:	
2.	Data counts:	ALL BIRTHS:
	a.	By occurrence: 1,736
	b.	By residence: 1,736

NORTHERN MARIANAS:

1.	Record count:	
2.	Data counts:	ALL BIRTHS:

a.	By occurrence:	1,384
b.	By residence:	1,381

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
1-4	4	<u>DATAYEAR</u> <u>Year Birth of Child (Data Year)</u> 1999 ... 1999
5	1	<u>RECTYPE</u> <u>Record Type</u> 1 ... Resident: State and county of occurrence and residence are the same. 2 ... Nonresident: State and/or county of occurrence and residence are different.
6	1	<u>RESTATUS</u> <u>Resident Status</u> <u>United States occurrence</u> 1 ... RESIDENTS: State and county of occurrence and residence are the same. 2 ... INTRASTATE NONRESIDENTS: State of occurrence and residence are the same, but county is different. 3 ... INTERSTATE NONRESIDENTS: State of occurrence and residence are different, but both are in the U.S. 4 ... FOREIGN RESIDENTS: State of occurrence is one of the 50 States or the District of Columbia, but place of residence of mother is outside of the U.S. <u>Puerto Rico occurrence</u> 1 ... RESIDENTS: Territory and county equivalent of occurrence and residence are the same. 2 ... INTRATERRITORY NONRESIDENTS: Territory of occurrence and residence are the same, but county equivalent is different. 4 ... FOREIGN RESIDENTS: Occurred in Puerto Rico to a resident of any other place.

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
6	1	<u>RESTATUS</u> <u>Resident Status (Cont'd)</u>
		<u>Virgin Islands occurrence</u>
	1	... RESIDENTS: Territory and county equivalent of occurrence and residence are the same.
	2	... INTRATERRITORY NONRESIDENTS: Territory of occurrence and residence are the same, but county equivalent is different.
	4	... FOREIGN RESIDENTS: Occurred in the Virgin Islands to a resident of any other place.
		<u>Guam occurrence</u>
	1	... RESIDENTS: Occurred in Guam to a resident of Guam or to a resident of the U.S.
	4	... FOREIGN RESIDENTS: Occurred in Guam to a resident of any place other than Guam or of the U.S.
		<u>American Samoa occurrence</u>
	1	... RESIDENTS: Territory and county equivalent of occurrence and residence are the same.
	2	... INTRATERRITORY NONRESIDENTS: Territory of occurrence and residence are the same, but county equivalent is different.
	4	... FOREIGN RESIDENTS: Occurred in the American Samoa to a resident of any other place.
		<u>Northern Marianas occurrence</u>
	1	... RESIDENTS: Territory and county equivalent of occurrence and residence are the same.
	2	... INTRATERRITORY NONRESIDENTS: Territory of occurrence and residence are the same, but county equivalent is different.
	4	... FOREIGN RESIDENTS: Occurred in the Northern Marianas to a resident of any other place.

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
7	1	<p><u>RECWT</u> <u>Record Weight</u></p> <p>1 ... Constant - as of the 1985 data year, this file contains data on a 100-percent basis from all reporting areas.</p>
8	1	<p><u>PLDEL</u> <u>Place or Facility of Birth</u></p> <p>1 ... Hospital 2 ... Freestanding Birthing Center 3 ... Clinic or Doctor's Office 4 ... A Residence 5 ... Other 9 ... Unknown or Not Stated</p>
9	1	<p><u>PLDEL3</u> <u>Place or Facility of Birth Recode</u></p> <p>1 ... In Hospital 2 ... Not in a Hospital 3 ... Unknown or Not Stated</p>
10	1	<p><u>BIRATTND</u> <u>Attendant at Birth</u></p> <p>1 ... Doctor of Medicine (M.D.) 2 ... Doctor of Osteopathy (D.O.) 3 ... Certified Nurse Midwife (C.N.M.) 4 ... Other Midwife 5 ... Other 9 ... Unknown or Not Stated</p>
11-26	16	<p><u>NOCCUR</u> <u>Place of Occurrence</u></p>
11-13	3	<p><u>RDSSCOCC</u> <u>Region, Division, and State Subcode of Occurrence</u></p>
11	1	<p><u>REGNOCC</u></p>

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
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Region of Occurrence

12	1	<u>DIVOCC</u> <u>Division of Occurrence</u>
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13	1	<u>STSUBOCC</u> <u>State Subcode of Occurrence</u>
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States are coded within division and the structure is designed to sequence the States as they appear in NCHS publications.

000	...	Not applicable: P.R., V.I., A.S., Guam or M.P. occurrence
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1	...	<u>NORTHEAST</u>
1	...	New England
1	...	Maine
2	...	New Hampshire
3	...	Vermont
4	...	Massachusetts

13	1	<u>STSUBOCC</u> <u>State Subcode of Occurrence (Cont'd)</u>	
	5	...	Rhode Island
	6	...	Connecticut
	2	...	<u>Middle Atlantic</u>
	1	...	New York
	2	...	New Jersey
	3	...	Pennsylvania
	2	...	<u>MIDWEST</u>
	3	...	<u>East North Central</u>
	1	...	Ohio
	2	...	Indiana
	3	...	Illinois
	4	...	Michigan
	5	...	Wisconsin
	4	...	<u>West North Central</u>
	1	...	Minnesota
	2	...	Iowa
	3	...	Missouri
	4	...	North Dakota
	5	...	South Dakota
	6	...	Nebraska
	7	...	Kansas
	3	...	<u>SOUTH</u>
	5	...	<u>South Atlantic</u>

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
		1 ... Delaware
		2 ... Maryland
		3 ... District of Columbia
		4 ... Virginia
		5 ... West Virginia
		6 ... North Carolina
		7 ... South Carolina
		8 ... Georgia
		9 ... Florida
		6 ... <u>East South Central</u>
		1 ... Kentucky
		2 ... Tennessee
		3 ... Alabama
		4 ... Mississippi
		7 ... <u>West South Central</u>
		1 ... Arkansas
		2 ... Louisiana
		3 ... Oklahoma
		4 ... Texas
		4 ... <u>WEST</u>
		8 ... <u>Mountain</u>
		1 ... Montana
		2 ... Idaho
		3 ... Wyoming
		4 ... Colorado
		5 ... New Mexico
		6 ... Arizona
		7 ... Utah
		8 ... Nevada
		9 ... <u>Pacific</u>
		1 ... Washington
		2 ... Oregon
		3 ... California
13	1	<u>STSUBOCC</u> <u>State Subcode of Occurrence (Cont'd)</u>
		4 ... Alaska
		5 ... Hawaii

14-15 2 STNATEXP
Expanded State of Occurrence

This item is designed to separately identify
New York city records from other New York
State records.

United States
01 ... Alabama

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
	02	... Alaska
	03	... Arizona
	04	... Arkansas
	05	... California
	06	... Colorado
	07	... Connecticut
	08	... Delaware
	09	... District of Columbia
	10	... Florida
	11	... Georgia
	12	... Hawaii
	13	... Idaho
	14	... Illinois
	15	... Indiana
	16	... Iowa
	17	... Kansas
	18	... Kentucky
	19	... Louisiana
	20	... Maine
	21	... Maryland
	22	... Massachusetts
	23	... Michigan
	24	... Minnesota
	25	... Mississippi
	26	... Missouri
	27	... Montana
	28	... Nebraska
	29	... Nevada
	30	... New Hampshire
	31	... New Jersey
	32	... New Mexico
	33	... New York
	34	... New York city
	35	... North Carolina
	36	... North Dakota
	37	... Ohio
	38	... Oklahoma
	39	... Oregon
	40	... Pennsylvania
	41	... Rhode Island
	42	... South Carolina
	43	... South Dakota
	44	... Tennessee
	45	... Texas

1999
Detail Natality Record

Tape
Location

Field
Size

Item and Code Outline

Expanded State of Occurrence (Cont'd)

46	...	Utah
47	...	Vermont
48	...	Virginia
49	...	Washington
50	...	West Virginia
51	...	Wisconsin
52	...	Wyoming

Puerto Rico

53	...	Puerto Rico
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Virgin Islands

54	...	Virgin Islands
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Guam

55	...	Guam
----	-----	------

American Samoa

62	...	American Samoa
----	-----	----------------

Northern Marianas

63	...	Northern Marianas
----	-----	-------------------

16-17

2

STATENAT

State of Occurrence

United States

01	...	Alabama
02	...	Alaska
03	...	Arizona
04	...	Arkansas
05	...	California
06	...	Colorado
07	...	Connecticut
08	...	Delaware
09	...	District of Columbia
10	...	Florida
11	...	Georgia
12	...	Hawaii
13	...	Idaho
14	...	Illinois
15	...	Indiana
16	...	Iowa
17	...	Kansas
18	...	Kentucky
19	...	Louisiana

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		20 ... Maine
		21 ... Maryland
		22 ... Massachusetts
		23 ... Michigan
		24 ... Minnesota
		25 ... Mississippi
		26 ... Missouri
		27 ... Montana
		28 ... Nebraska
16-17	2	<u>STATENAT</u>
		<u>State of Occurrence (Cont'd)</u>
		29 ... Nevada
		30 ... New Hampshire
		31 ... New Jersey
		32 ... New Mexico
		33 ... New York
		34 ... North Carolina
		35 ... North Dakota
		36 ... Ohio
		37 ... Oklahoma
		38 ... Oregon
		39 ... Pennsylvania
		40 ... Rhode Island
		41 ... South Carolina
		42 ... South Dakota
		43 ... Tennessee
		44 ... Texas
		45 ... Utah
		46 ... Vermont
		47 ... Virginia
		48 ... Washington
		49 ... West Virginia
		50 ... Wisconsin
		51 ... Wyoming
		<u>Puerto Rico</u>
		52 ... Puerto Rico
		<u>Virgin Islands</u>
		53 ... Virgin Islands
		<u>Guam</u>
		54 ... Guam
		<u>American Samoa</u>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		61 ... American Samoa
		<u>Northern Marianas</u>
		62 ... Northern Marianas
18-20	3	<u>CNTYNAT</u> <u>County of Occurrence</u>
		001-nnn ... Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State and identify each county with a population of 100,000 or more in 1990. (Note: To uniquely identify a county, both and State and county codes must be used.) A complete list of counties is shown in the Geographic Code Outline further back in this document.
18-20	3	<u>CNTYNAT</u> <u>County of Occurrence (Cont'd)</u>
		999 ... County of less than 100,000 population
21-25	5	<u>FIPSOCC</u> <u>Federal Information Processing Standards (FIPS)</u> <u>Geographic Codes (Occurrence)</u>
		Refer to the Geographic Code Outline further back in this document for a detailed list of areas and codes. For an explanation of FIPS codes, reference should be made to various National Institute of Standards and Technology (NIST) publications. Some Geographic codes have changed to reflect the results of the 1990 Census.
21-22	2	<u>STOCCFIP</u> <u>State of Occurrence (FIPS)</u>
		<u>United States</u>
		01 ... Alabama
		02 ... Alaska
		04 ... Arizona
		05 ... Arkansas

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
		06 ... California
		08 ... Colorado
		09 ... Connecticut
		10 ... Delaware
		11 ... District of Columbia
		12 ... Florida
		13 ... Georgia
		15 ... Hawaii
		16 ... Idaho
		17 ... Illinois
		18 ... Indiana
		19 ... Iowa
		20 ... Kansas
		21 ... Kentucky
		22 ... Louisiana
		23 ... Maine
		24 ... Maryland
		25 ... Massachusetts
		26 ... Michigan
		27 ... Minnesota
		28 ... Mississippi
		29 ... Missouri
		30 ... Montana
		31 ... Nebraska
		32 ... Nevada
		33 ... New Hampshire
		34 ... New Jersey
		35 ... New Mexico
		36 ... New York
		37 ... North Carolina
		38 ... North Dakota
		39 ... Ohio

21-22

2

STOCCFIP
State of Occurrence (FIPS) (Cont'd)

40	...	Oklahoma
41	...	Oregon
42	...	Pennsylvania
44	...	Rhode Island
45	...	South Carolina
46	...	South Dakota
47	...	Tennessee
48	...	Texas
49	...	Utah
50	...	Vermont
51	...	Virginia
53	...	Washington

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		54 ... West Virginia
		55 ... Wisconsin
		56 ... Wyoming
		<u>Puerto Rico</u>
		72 ... Puerto Rico
		<u>Virgin Islands</u>
		78 ... Virgin Islands
		<u>Guam</u>
		66 ... Guam
		<u>American Samoa</u>
		60 ... American Samoa
		<u>Northern Marianas</u>
		69 ... Northern Marianas
23-25	3	<u>CNTOCFIP</u> <u>County of Occurrence (FIPS)</u>
		001-nnn ... Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State. (Note: To uniquely identify a county, both the State and county codes must be used.) A complete list of counties is shown in the Geographic Code Outline further back in this document.
		999 ... County of less than 100,000 population

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>																														
26	1	<p><u>CNTOCPOP</u> <u>Population Size of County of Occurrence</u></p> <p>Based on the results of the 1990 Census</p> <table border="0" style="margin-left: 40px;"> <tr> <td>0</td> <td>...</td> <td>County of 1,000,000 or more</td> </tr> <tr> <td>1</td> <td>...</td> <td>County of 500,000 to 1,000,000</td> </tr> <tr> <td>2</td> <td>...</td> <td>County of 250,000 to 500,000</td> </tr> <tr> <td>3</td> <td>...</td> <td>County of 100,000 to 250,000</td> </tr> </table>	0	...	County of 1,000,000 or more	1	...	County of 500,000 to 1,000,000	2	...	County of 250,000 to 500,000	3	...	County of 100,000 to 250,000																		
0	...	County of 1,000,000 or more																														
1	...	County of 500,000 to 1,000,000																														
2	...	County of 250,000 to 500,000																														
3	...	County of 100,000 to 250,000																														
27-58	32	<p><u>NRESID</u> <u>Place of Residence</u></p> <p>Refer to the Geographic Code Outline further back in this document for a detailed list of areas and codes. Some Geographic codes have changed to reflect the results of the 1990 Census.</p>																														
27-29	3	<p><u>RDSCRES</u> <u>Region, Division, and State Subcode of Residence</u></p>																														
27	1	<p><u>REGNRES</u> <u>Region of Residence</u></p>																														
28	1	<p><u>DIVRES</u> <u>Division of Residence</u></p>																														
29	1	<p><u>STSUBRES</u> <u>State Subcode of Residence</u></p> <p>States are coded within Division and the code structure is designed to sequence the States as they appear in NCHS publications.</p> <p><u>APPLICABLE TO U.S. ONLY</u></p> <table border="0" style="margin-left: 40px;"> <tr> <td>000</td> <td>...</td> <td><u>Foreign Residents</u></td> </tr> <tr> <td>1</td> <td>...</td> <td><u>NORTHEAST</u></td> </tr> <tr> <td>1</td> <td>...</td> <td><u>New England</u></td> </tr> <tr> <td>1</td> <td>...</td> <td>Maine</td> </tr> <tr> <td>2</td> <td>...</td> <td>New Hampshire</td> </tr> <tr> <td>3</td> <td>...</td> <td>Vermont</td> </tr> <tr> <td>4</td> <td>...</td> <td>Massachusetts</td> </tr> <tr> <td>5</td> <td>...</td> <td>Rhode Island</td> </tr> <tr> <td>6</td> <td>...</td> <td>Connecticut</td> </tr> <tr> <td>2</td> <td>...</td> <td><u>Middle Atlantic</u></td> </tr> </table>	000	...	<u>Foreign Residents</u>	1	...	<u>NORTHEAST</u>	1	...	<u>New England</u>	1	...	Maine	2	...	New Hampshire	3	...	Vermont	4	...	Massachusetts	5	...	Rhode Island	6	...	Connecticut	2	...	<u>Middle Atlantic</u>
000	...	<u>Foreign Residents</u>																														
1	...	<u>NORTHEAST</u>																														
1	...	<u>New England</u>																														
1	...	Maine																														
2	...	New Hampshire																														
3	...	Vermont																														
4	...	Massachusetts																														
5	...	Rhode Island																														
6	...	Connecticut																														
2	...	<u>Middle Atlantic</u>																														

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		1 ... New York
		2 ... New Jersey
		3 ... Pennsylvania
	2	... <u>MIDWEST</u>
	3	... <u>East North Central</u>
		1 ... Ohio
		2 ... Indiana
		3 ... Illinois
		4 ... Michigan
		5 ... Wisconsin
	4	... <u>West North Central</u>
29	1	<u>STSUBRES</u>
		<u>State Subcode of Residence (Cont'd)</u>
		1 ... Minnesota
		2 ... Iowa
		3 ... Missouri
		4 ... North Dakota
		5 ... South Dakota
		6 ... Nebraska
		7 ... Kansas
	3	... <u>SOUTH</u>
	5	... <u>South Atlantic</u>
		1 ... Delaware
		2 ... Maryland
		3 ... District of Columbia
		4 ... Virginia
		5 ... West Virginia
		6 ... North Carolina
		7 ... South Carolina
		8 ... Georgia
		9 ... Florida
	6	... <u>East South Central</u>
		1 ... Kentucky
		2 ... Tennessee
		3 ... Alabama
		4 ... Mississippi
	7	... <u>West South Central</u>
		1 ... Arkansas
		2 ... Louisiana
		3 ... Oklahoma
		4 ... Texas
	4	... <u>WEST</u>
	8	... <u>Mountain</u>
		1 ... Montana
		2 ... Idaho
		3 ... Wyoming

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
		4 ... Colorado
		5 ... New Mexico
		6 ... Arizona
		7 ... Utah
		8 ... Nevada
		9 ... <u>Pacific</u>
		1 ... Washington
		2 ... Oregon
		3 ... California
		4 ... Alaska
		5 ... Hawaii
30-31	2	<u>STRESEXP</u> <u>Expanded State of Residence</u>
		This item is designed to separately identify New York City records from other New York State records.
		<u>United States occurrence</u>
		01 ... Alabama
		02 ... Alaska
30-31	2	<u>STRESEXP</u> <u>Expanded State of Residence (Cont'd)</u>
		03 ... Arizona
		04 ... Arkansas
		05 ... California
		06 ... Colorado
		07 ... Connecticut
		08 ... Delaware
		09 ... District of Columbia
		10 ... Florida
		11 ... Georgia
		12 ... Hawaii
		13 ... Idaho
		14 ... Illinois
		15 ... Indiana
		16 ... Iowa
		17 ... Kansas
		18 ... Kentucky
		19 ... Louisiana
		20 ... Maine
		21 ... Maryland
		22 ... Massachusetts
		23 ... Michigan

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
		24 ... Minnesota
		25 ... Mississippi
		26 ... Missouri
		27 ... Montana
		28 ... Nebraska
		29 ... Nevada
		30 ... New Hampshire
		31 ... New Jersey
		32 ... New Mexico
		33 ... New York
		34 ... New York City
		35 ... North Carolina
		36 ... North Dakota
		37 ... Ohio
		38 ... Oklahoma
		39 ... Oregon
		40 ... Pennsylvania
		41 ... Rhode Island
		42 ... South Carolina
		43 ... South Dakota
		44 ... Tennessee
		45 ... Texas
		46 ... Utah
		47 ... Vermont
		48 ... Virginia
		49 ... Washington
		50 ... West Virginia
		51 ... Wisconsin
		52 ... Wyoming
		53-58,60, ... Foreign Residents 62,63
		53 ... Puerto Rico
		54 ... Virgin Islands
		55 ... Guam
30-31	2	<u>STRESEXP</u>
		<u>Expanded State of Residence (Cont'd)</u>
		62 ... American Samoa
		63 ... Northern Marianas
		56 ... Canada
		57 ... Cuba
		58 ... Mexico
		60 ... Remainder of the world
		<u>Puerto Rico occurrence</u>
		53 ... Puerto Rico
		01-52,54-58,60,62,63... Foreign residents: Refer

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>	
			to U.S. for specific code structure.
		<u>Virgin Islands occurrence</u>	
		54 ...	Virgin Islands
		01-53,55-58,60,62,63...	Foreign residents: Refer to U.S. for specific code structure.
		<u>Guam occurrence</u>	
		55 ...	Guam
		01-52 ...	U.S. resident is also considered a resident of Guam.
		53-54,56-58,60,62,63...	Foreign residents: Refer to U.S. for specific code structure.
		<u>American Samoa occurrence</u>	
		62 ...	American Samoa
		01-52 ...	U.S. resident is also considered a resident of American Samoa
		53-58,60,63 ...	Foreign residents: Refer to U.S. for specific code structure.
		<u>Northern Marianas</u>	
		63 ...	Northern Marianas
		01-52 ...	U.S. resident is also considered a resident of Northern Marianas.
		53-58,60,62 ...	Foreign residents: Refer to U.S. for specific code structure.
32-33	2	<u>STATERES</u>	
		<u>State of Residence</u>	
		<u>United States occurrence</u>	
		01 ... Alabama	
		02 ... Alaska	
		03 ... Arizona	
		04 ... Arkansas	
		05 ... California	
		06 ... Colorado	
		07 ... Connecticut	
32-33	2	<u>STATERES</u>	
		<u>State of Residence (Cont'd)</u>	

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
	08	... Delaware
	09	... District of Columbia
	10	... Florida
	11	... Georgia
	12	... Hawaii
	13	... Idaho
	14	... Illinois
	15	... Indiana
	16	... Iowa
	17	... Kansas
	18	... Kentucky
	19	... Louisiana
	20	... Maine
	21	... Maryland
	22	... Massachusetts
	23	... Michigan
	24	... Minnesota
	25	... Mississippi
	26	... Missouri
	27	... Montana
	28	... Nebraska
	29	... Nevada
	30	... New Hampshire
	31	... New Jersey
	32	... New Mexico
	33	... New York
	34	... North Carolina
	35	... North Dakota
	36	... Ohio
	37	... Oklahoma
	38	... Oregon
	39	... Pennsylvania
	40	... Rhode Island
	41	... South Carolina
	42	... South Dakota
	43	... Tennessee
	44	... Texas
	45	... Utah
	46	... Vermont
	47	... Virginia
	48	... Washington
	49	... West Virginia
	50	... Wisconsin
	51	... Wyoming
	52-57,59,61,62..	Foreign Residents
	52	... Puerto Rico

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		53 ... Virgin Islands
		54 ... Guam
		61 ... American Samoa
		62 ... Northern Marianas
		55 ... Canada
		56 ... Cuba
		57 ... Mexico
		59 ... Remainder of the world
32-33	2	<u>STATERES</u> <u>State of Residence (Cont'd)</u>
		<u>Puerto Rico occurrence</u>
		52 ... Puerto Rico
		01-51,53-57,59, ... Foreign Residents: Refer to
		61,62 U.S. for specific code structure.
		<u>Virgin Islands occurrence</u>
		53 ... Virgin Islands
		01-52,54-57,59, ... Foreign Residents: Refer to
		61,62 U.S. for specific code structure.
		<u>Guam occurrence</u>
		54 ... Guam
		01-51 ... U.S. resident is also considered a resident of Guam.
		52-53,55-57,59, ... Foreign Residents: Refer to
		61,62 U.S. for specific code structure.
		<u>American Samoa occurrence</u>
		61 ... American Samoa
		01-51 ... U.S. resident is also considered a resident of American Samoa
		52-57,59,62 ... Foreign Residents: Refer to
		U.S. for specific code structure.
		<u>Northern Marianas</u>
		62 ... Northern Marianas
		01-51 ... U.S resident is also considered a resident of Northern Marianas.
		52-57,59,61 ... Foreign Residents: Refer to
		U.S. for specific code

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
--------------------------------	-----------------------------	------------------------------

structure.

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
34-36	3	<p><u>CNTYRES</u> <u>County of Residence</u></p> <p>A complete list of counties is shown in the Geographic Code Outline further back in this document.</p> <p>001-nnn ... Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State and identify each county with a population of 100,000 or more in 1990. (Note: To uniquely identify a county, both the State and county codes must be used.)</p> <p>999 ... County of less than 100,000 population</p> <p>ZZZ ... Foreign Residents</p>
37-39	3	<p><u>CITYRES</u> <u>City of Residence</u></p> <p>A complete list of cities is shown in the Geographic Code Outline further back in this document.</p> <p>001-nnn ... Cities are numbered alphabetically within each State and identify each city with a population of 100,000 or more in 1990. (Note: To uniquely identify a city, both the State and city codes must be used. State, county and city codes may also be used.)</p> <p>999 ... Balance of county</p> <p>ZZZ ... Foreign residents</p>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>																											
40	1	<p><u>CITRSPOP</u> <u>Population Size of City of Residence</u></p> <p>Based on the results of the 1990 census</p> <table border="0"> <tr><td>0</td><td>...</td><td>Place of 1,000,000 or more</td></tr> <tr><td>1</td><td>...</td><td>Place of 500,000 to 1,000,000</td></tr> <tr><td>2</td><td>...</td><td>Place of 250,000 to 500,000</td></tr> <tr><td>3</td><td>...</td><td>Place of 100,000 to 250,000</td></tr> <tr><td>9</td><td>...</td><td>All other areas in the U.S.</td></tr> <tr><td>Z</td><td>...</td><td>Foreign residents</td></tr> </table>	0	...	Place of 1,000,000 or more	1	...	Place of 500,000 to 1,000,000	2	...	Place of 250,000 to 500,000	3	...	Place of 100,000 to 250,000	9	...	All other areas in the U.S.	Z	...	Foreign residents									
0	...	Place of 1,000,000 or more																											
1	...	Place of 500,000 to 1,000,000																											
2	...	Place of 250,000 to 500,000																											
3	...	Place of 100,000 to 250,000																											
9	...	All other areas in the U.S.																											
Z	...	Foreign residents																											
41	1	<p><u>METRORES</u> <u>Metropolitan - Nonmetropolitan County of Residence</u></p> <p><u>NOTE:</u> VIRGIN ISLANDS, GUAM, NORTHERN MARIANAS AND AMERICAN SAMOA DO NOT HAVE ANY METROPOLITAN AREAS</p> <table border="0"> <tr><td>1</td><td>...</td><td>Metropolitan county</td></tr> <tr><td>2</td><td>...</td><td>Nonmetropolitan county</td></tr> <tr><td>Z</td><td>...</td><td>Foreign residents</td></tr> </table>	1	...	Metropolitan county	2	...	Nonmetropolitan county	Z	...	Foreign residents																		
1	...	Metropolitan county																											
2	...	Nonmetropolitan county																											
Z	...	Foreign residents																											
42-57	16	<p><u>FIPSRES</u> <u>Federal Information Processing Standards (FIPS) Geographic Codes (Residence)</u></p> <p>Refer to the Geographic Code Outline further back in this document for a detailed list of areas and codes. For an explanation of FIPS codes, reference should be made to various National Institute of Standards and Technology (NIST) publications. Some Geographic Codes have changed to reflect the results of the 1990 Census.</p>																											
42-43	2	<p><u>STRESFIP</u> <u>State of Residence (FIPS)</u></p> <table border="0"> <tr><td>00</td><td>...</td><td>Foreign residents</td></tr> <tr><td>01</td><td>...</td><td>Alabama</td></tr> <tr><td>02</td><td>...</td><td>Alaska</td></tr> <tr><td>04</td><td>...</td><td>Arizona</td></tr> <tr><td>05</td><td>...</td><td>Arkansas</td></tr> <tr><td>06</td><td>...</td><td>California</td></tr> <tr><td>08</td><td>...</td><td>Colorado</td></tr> <tr><td>09</td><td>...</td><td>Connecticut</td></tr> <tr><td>10</td><td>...</td><td>Delaware</td></tr> </table>	00	...	Foreign residents	01	...	Alabama	02	...	Alaska	04	...	Arizona	05	...	Arkansas	06	...	California	08	...	Colorado	09	...	Connecticut	10	...	Delaware
00	...	Foreign residents																											
01	...	Alabama																											
02	...	Alaska																											
04	...	Arizona																											
05	...	Arkansas																											
06	...	California																											
08	...	Colorado																											
09	...	Connecticut																											
10	...	Delaware																											

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		11 ... District of Columbia
		12 ... Florida
		13 ... Georgia
		15 ... Hawaii
		16 ... Idaho
		17 ... Illinois
		18 ... Indiana
		19 ... Iowa
		20 ... Kansas
		21 ... Kentucky
		22 ... Louisiana

42-43

2

STRESFIP

State of Residence (FIPS) (Cont'd)

23	...	Maine
24	...	Maryland
25	...	Massachusetts
26	...	Michigan
27	...	Minnesota
28	...	Mississippi
29	...	Missouri
30	...	Montana
31	...	Nebraska
32	...	Nevada
33	...	New Hampshire
34	...	New Jersey
35	...	New Mexico
36	...	New York
37	...	North Carolina
38	...	North Dakota
39	...	Ohio
40	...	Oklahoma
41	...	Oregon
42	...	Pennsylvania
44	...	Rhode Island
45	...	South Carolina
46	...	South Dakota
47	...	Tennessee
48	...	Texas
49	...	Utah
50	...	Vermont
51	...	Virginia
53	...	Washington
54	...	West Virginia
55	...	Wisconsin
56	...	Wyoming

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		<u>Puerto Rico occurrence</u>
		00-56,60,66,78,69 ... Foreign Residents: Refer to U.S. for specific code structure
		72 ... Puerto Rico
		<u>Virgin Islands occurrence</u>
		00-56,60,66,72,69 ... Foreign Residents: Refer to U.S. for specific code structure
		78 ... Virgin Islands
		<u>Guam occurrence</u>
		00,60,72,78,69 ... Foreign Residents: Refer to U.S. for specific code structure
		01-56 ... U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure
		66 ... Guam
42-43	2	<u>STRESFIP</u> <u>State of Residence (FIPS) (Cont'd)</u>
		<u>American Samoa occurrence</u>
		00,66,72,78,69 ... Foreign Residents: Refer to U.S. for specific code structure
		01-56 ... U.S. Resident is also considered a resident of American Samoa. Refer to specific code structure
		60 ... American Samoa
		<u>Northern Marianas</u>
		00,60,66,72,78 ... Foreign Residents: Refer to U.S. for specific code structure.
		01-56 ... U.S. Resident is also considered a resident of Northern Marianas. Refer to Specific code structure.
		69 ... Northern Marianas
44-46	3	<u>CNTYRFIP</u> <u>County of Residence (FIPS)</u>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		001-nnn ... Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State. (Note: To uniquely identify a county, both the State and county codes must be used.) 999 ... County of less than 100,000 population 000 ... Foreign residents
47-51	5	<p><u>PLACEFIP</u> <u>Place (City) of Residence</u></p> <p>A complete list of cities is shown in the Geographic code outline further back in this document. Effective with the 1994 data year, the FIPS place code has been added to the Natality record. It identifies each city of 100,000 population or more in 1990.</p> <p>00000 ...Foreign residents 00001- nnnnn ... Code range 99999 ... Balance of county; or city of less than 100,000 population</p>
52-53	2	<p><u>CMSA</u> <u>CMSA of Residence (FIPS)</u></p> <p>Consolidated Metropolitan Statistical Areas are groupings of certain Primary Metropolitan Statistical Areas and are defined by the U.S. Office of Management and Budget (OMB) as of June 30, 1990.</p>
52-53	2	<p><u>CMSA</u> <u>CMSA of Residence (FIPS) (Cont'd)</u></p> <p><u>All AREAS</u></p> <p>00 ... Not a CMSA</p> <p><u>United States occurrence</u></p> <p>07 ... Boston-Worcester-Lawrence, MA-NH-ME CT, CMSA 14 ... Chicago-Gary-Kenosha, IL-IN-WI, CMSA 21 ... Cincinnati-Hamilton, OH-KY-IN, CMSA 28 ... Cleveland-Akron, OH, CMSA 31 ... Dallas-Fort Worth, TX, CMSA</p>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		34 ... Denver-Boulder-Greeley, CO, CMSA
		35 ... Detroit-Ann Arbor-Flint, MI, CMSA
		42 ... Houston-Galveston-Brazoria, TX, CMSA
		49 ... Los Angeles-Riverside-Orange County, CA, CMSA
		56 ... Miami-Fort Lauderdale, FL, CMSA
		63 ... Milwaukee-Racine, WI, CMSA
		70 ... New York-Northern New Jersey-Long Island, NY-NJ-CT-PA, CMSA
		77 ... Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD, CMSA
		79 ... Portland-Salem, OR-WA, CMSA
		82 ... Sacramento-Yolo, CA, CMSA
		84 ... San Francisco-Oakland-San Jose, CA, CMSA
		91 ... Seattle-Tacoma-Bremerton, WA, CMSA
		97 ... Washington-Baltimore, DC-MD-VA-WV, CMSA

Puerto Rico occurrence

87 ... San Juan-Caguas-Arecibo, PR, CMSA

54-57

4

SMSARFIP

PMSA/MSA of Residence (FIPS)

Primary Metropolitan Statistical Areas and Metropolitan Statistical Areas are those defined by the U.S. Office of Management and Budget as of 1990. For New England, the New England County Metropolitan Areas (NECMA's) are used. Further back in this document is a list of PMSA's, MSA's, NECMA's, and their component counties.

0000 ... Nonmetropolitan counties or foreign residents
 0040-9360 ... Code range
 9999 ... Area of less than 100,000 population

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>																		
58	1	<p><u>CNTRSPOP</u> <u>Population Size of County of Residence</u></p> <p>Based on the results of the 1990 Census.</p> <table border="0"> <tr><td>0</td><td>...</td><td>County of 1,000,000 or more</td></tr> <tr><td>1</td><td>...</td><td>County of 500,000 to 1,000,000</td></tr> <tr><td>2</td><td>...</td><td>County of 250,000 to 500,000</td></tr> <tr><td>3</td><td>...</td><td>County of 100,000 to 250,000</td></tr> <tr><td>9</td><td>...</td><td>County of less than 100,000</td></tr> <tr><td>Z</td><td>...</td><td>Foreign resident</td></tr> </table>	0	...	County of 1,000,000 or more	1	...	County of 500,000 to 1,000,000	2	...	County of 250,000 to 500,000	3	...	County of 100,000 to 250,000	9	...	County of less than 100,000	Z	...	Foreign resident
0	...	County of 1,000,000 or more																		
1	...	County of 500,000 to 1,000,000																		
2	...	County of 250,000 to 500,000																		
3	...	County of 100,000 to 250,000																		
9	...	County of less than 100,000																		
Z	...	Foreign resident																		
59-67	9	<p><u>RIA</u> <u>Reserved Positions</u></p>																		
68	1	<p><u>MAGERFLG</u> <u>Reported Age of Mother Used Flag</u></p> <p>This position is flagged whenever the mother's reported age is used. The reported age is used, if valid, when age could not be computed or when the computed age is outside the 10-54 code range.</p> <table border="0"> <tr><td>Blank</td><td>...</td><td>Reported age is not used</td></tr> <tr><td>1</td><td>...</td><td>Reported age is used</td></tr> </table>	Blank	...	Reported age is not used	1	...	Reported age is used												
Blank	...	Reported age is not used																		
1	...	Reported age is used																		
69	1	<p><u>MAGEIMP</u> <u>Age of Mother Imputation Flag</u></p> <table border="0"> <tr><td>Blank</td><td>...</td><td>Age is not imputed</td></tr> <tr><td>1</td><td>...</td><td>Age is imputed</td></tr> </table>	Blank	...	Age is not imputed	1	...	Age is imputed												
Blank	...	Age is not imputed																		
1	...	Age is imputed																		
70-71	2	<p><u>DMAGE</u> <u>Age of Mother</u></p> <p>This item is: a) computed using dates of birth of mother and of delivery; b) reported; or c) imputed. This is the age item used in NCHS publications.</p> <table border="0"> <tr><td>10-54</td><td>...</td><td>Age in single years</td></tr> </table>	10-54	...	Age in single years															
10-54	...	Age in single years																		
72-73	2	<p><u>MAGE36</u> <u>Age of Mother Recode 36</u></p> <table border="0"> <tr><td>01</td><td>...</td><td>Under 15 years</td></tr> <tr><td>02</td><td>...</td><td>15 years</td></tr> </table>	01	...	Under 15 years	02	...	15 years												
01	...	Under 15 years																		
02	...	15 years																		

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		03 ... 16 years
		04 ... 17 years
		05 ... 18 years
		06 ... 19 years
		07 ... 20 years
		08 ... 21 years
		09 ... 22 years
		10 ... 23 years
		11 ... 24 years
		12 ... 25 years
		13 ... 26 years

72-73

2

MAGE36
Age of Mother Recode 36 (Cont'd)

14	...	27 years
15	...	28 years
16	...	29 years
17	...	30 years
18	...	31 years
19	...	32 years
20	...	33 years
21	...	34 years
22	...	35 years
23	...	36 years
24	...	37 years
25	...	38 years
26	...	39 years
27	...	40 years
28	...	41 years
29	...	42 years
30	...	43 years
31	...	44 years
32	...	45 years
33	...	46 years
34	...	47 years
35	...	48 years
36	...	49 years
37	...	50 years
38	...	51 years
39	...	52 years
40	...	53 years
41	...	54 years

74-75

2

MAGE12
Age of Mother Recode 12

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		01 ... Under 15 years 03 ... 15 years 04 ... 16 years 05 ... 17 years 06 ... 18 years 07 ... 19 years 08 ... 20 - 24 years 09 ... 25 - 29 years 10 ... 30 - 34 years 11 ... 35 - 39 years 12 ... 40 - 44 years 13 ... 45 - 49 years 14 ... 50 - 54 years
76	1	<u>MAGES</u> <u>Age of Mother Recode 8</u> 1 ... Under 15 years 2 ... 15 - 19 years 3 ... 20 - 24 years 4 ... 25 - 29 years 5 ... 30 - 34 years 6 ... 35 - 39 years
76	1	<u>MAGES</u> <u>Age of Mother Recode 8 (Cont'd)</u> 7 ... 40 - 44 years 8 ... 45 - 49 years 9 ... 50 - 54 years
77	1	<u>ORMOTH</u> <u>Hispanic Origin of Mother</u> Hispanic origin is reported by all areas except Puerto Rico, and American Samoa 0 ... Non-Hispanic 1 ... Mexican 2 ... Puerto Rican 3 ... Cuban 4 ... Central or South American 5 ... Other and unknown Hispanic 9 ... Origin unknown or not stated
78	1	<u>ORRACEM</u> <u>Hispanic Origin and Race of Mother Recode</u>

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
		<p>Hispanic origin is reported by all areas except Puerto Rico, and American Samoa</p> <p>1 ... Mexican 2 ... Puerto Rican 3 ... Cuban 4 ... Central or South American 5 ... Other and unknown Hispanic 6 ... Non-Hispanic White 7 ... Non-Hispanic Black 8 ... Non-Hispanic other races 9 ... Origin unknown or not stated</p>
79	1	<p><u>MRACEIMP</u> <u>Race of Mother Imputation Flag</u></p> <p>Blank ... Race is not imputed 1 ... Unknown race is imputed 2 ... All other races, formerly code 09, is imputed</p>
80-81	2	<p><u>MRACE</u> <u>Race of Mother</u></p> <p><u>United States occurrence</u> Beginning with 1992 data, some areas started reporting additional Asian or Pacific Islander codes for race. Codes 18-68 replace old code 08 for these areas. Code 78 replaces old code 08 for all other areas. For consistency with Census race code 09 (all other races) used prior to 1992 has been imputed.</p> <p>01 ... White</p>
80-81	2	<p><u>MRACE</u> <u>Race of Mother (Cont'd)</u></p> <p>02 ... Black 03 ... American Indian (includes Aleuts and Eskimos) 04 ... Chinese 05 ... Japanese 06 ... Hawaiian (includes part-Hawaiian) 07 ... Filipino 18 ... Asian Indian</p>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
	28	... Korean
	38	... Samoan
	48	... Vietnamese
	58	... Guamanian
	68	... Other Asian or Pacific Islander in areas reporting codes 18-58
	78	... Combined other Asian or Pacific Islander, includes codes 18-68 for areas that do not report them separately
 <u>Puerto Rico occurrence</u>		
	01	... White
	02	... Black
	00	... Other races
 <u>Virgin Islands occurrence</u>		
	01	... White
	02	... Black
	03	... American Indian (includes Aleuts and Eskimos)
	04	... Chinese
	05	... Japanese
	06	... Hawaiian (includes part-Hawaiian)
	07	... Filipino
	08	... Other Asian or Pacific Islander
 <u>Guam occurrence</u>		
	01	... White
	02	... Black
	03	... American Indian (includes Aleuts and Eskimos)
	04	... Chinese
	05	... Japanese
	06	... Hawaiian (includes part-Hawaiian)
	07	... Filipino
	08	... Other Asian or Pacific Islander
	58	... Guamanian
 <u>American Samoa occurrence</u>		
	01	... White
	02	... Black
	03	... American Indian (includes Aleuts and Eskimos)
	04	... Chinese

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
80-81	2	<p><u>MRACE</u> <u>Race of Mother (Cont'd)</u></p> <p>05 ... Japanese 06 ... Hawaiian (includes part-Hawaiian) 07 ... Filipino 08 ... Other Asian or Pacific Islander</p> <p><u>Northern Marianas occurrence</u></p> <p>01 ... White 02 ... Black 03 ... American Indian (includes Aleuts and Eskimos) 04 ... Chinese 05 ... Japanese 06 ... Hawaiian (includes part-Hawaiian) 07 ... Filipino 08 ... Other Asian or Pacific Islander</p>
82	1	<p><u>MRACE3</u> <u>Race of Mother Recode</u></p> <p><u>For All Areas</u></p> <p>1 ... White 2 ... Races other than White or Black 3 ... Black</p>
83-84	2	<p><u>DMEDUC</u> <u>Education of Mother</u></p> <p>Effective with 1992 data, all areas report education.</p> <p>00 ... No formal education 01-08 ... Years of elementary school</p>
83-84	2	<p><u>DMEDUC</u> <u>Education of Mother</u></p> <p>09 ... 1 year of high school 10 ... 2 years of high school 11 ... 3 years of high school 12 ... 4 years of high school 13 ... 1 year of college 14 ... 2 years of college</p>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		15 ... 3 years of college
		16 ... 4 years of college
		17 ... 5 or more years of college
		99 ... Not stated
85	1	<u>MEDUC6</u> <u>Education of Mother Recode</u>
		1 ... 0 - 8 years
		2 ... 9 - 11 years
		3 ... 12 years
85	1	<u>MEDUC6</u> <u>Education of Mother Recode (Cont'd)</u>
		4 ... 13 - 15 years
		5 ... 16 years and over
		6 ... Not stated
86	1	<u>DMARIMP</u> <u>Marital Status of Mother Imputation Flag</u>
		Blank ... Marital Status is not imputed
		1 ... Marital Status is imputed
87	1	<u>DMAR</u> <u>Marital Status of Mother</u>
		Marital status is not reported by all areas. See reporting flags.
		<u>United States/Virgin Island/Guam/American Samoa/Northern Marianas</u>
		1 ... Married
		2 ... Unmarried
		9 ... Unknown or not stated
		<u>Puerto Rico</u>
		1 ... Married
		2 ... Unmarried parents living together
		3 ... Unmarried parents not living together
		9 ... Unknown or not stated
88-89	2	<u>MPLBIR</u> <u>Place of Birth of Mother</u>
		01 ... Alabama

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		02 ... Alaska
		03 ... Arizona
		04 ... Arkansas
		05 ... California
		06 ... Colorado
		07 ... Connecticut
		08 ... Delaware
		09 ... District of Columbia
		10 ... Florida
		11 ... Georgia
		12 ... Hawaii
		13 ... Idaho
		14 ... Illinois
		15 ... Indiana
		16 ... Iowa
		17 ... Kansas
		18 ... Kentucky
		19 ... Louisiana
		20 ... Maine
		21 ... Maryland
		22 ... Massachusetts
		23 ... Michigan
		24 ... Minnesota

88-89

2

MPLBIR

Place of Birth of Mother (Cont'd)

		25 ... Mississippi
		26 ... Missouri
		27 ... Montana
		28 ... Nebraska
		29 ... Nevada
		30 ... New Hampshire
		31 ... New Jersey
		32 ... New Mexico
		33 ... New York
		34 ... North Carolina
		35 ... North Dakota
		36 ... Ohio
		37 ... Oklahoma
		38 ... Oregon
		39 ... Pennsylvania
		40 ... Rhode Island
		41 ... South Carolina
		42 ... South Dakota
		43 ... Tennessee
		44 ... Texas

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		45 ... Utah
		46 ... Vermont
		47 ... Virginia
		48 ... Washington
		49 ... West Virginia
		50 ... Wisconsin
		51 ... Wyoming
		52 ... Puerto Rico
		53 ... Virgin Islands
		54 ... Guam
		61 ... American Samoa
		62 ... Northern Marianas
		55 ... Canada
		56 ... Cuba
		57 ... Mexico
		59 ... Remainder of the World
		99 ... Not classifiable
90	1	<u>MPLBIRR</u> <u>Place of Birth of Mother Recode</u>
		1 ... Native born
		2 ... Foreign born
		3 ... Unknown or not stated
91-92	2	<u>DMAGERPT</u> <u>Reported Age of Mother</u>
		10-54 ... Age in single years
		99 ... Unknown or not stated

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
93	1	<p><u>ADEQUACY</u> <u>Adequacy Of Care Recode (Kessner Index)</u></p> <p>This recode is based on a modified Kessner criterion. Month Prenatal Care Began, Number of Prenatal Visits, and Gestation are the items used to generate this recode.</p> <p>1 ... Adequate 2 ... Intermediate 3 ... Inadequate 4 ... Unknown</p>
94-95	2	<p><u>NLBNI</u> <u>Number of Live Births, Now Living</u></p> <p>Does not include this birth or adoptions.</p> <p>00-30 ... Stated number of births 99 ... Unknown or not stated</p>
96-97	2	<p><u>NLBND</u> <u>Number of Live Births, Now Dead</u></p> <p>Does not include this birth or adoptions.</p> <p>00-30 ... Stated number of births 99 ... Unknown or not stated</p>
98-99	2	<p><u>NOTERM</u> <u>Number of Other Terminations</u></p> <p>Includes spontaneous and induced at any time after conception.</p> <p>00-30 ... Stated number of other terminations 99 ... Unknown or not stated</p>
100-101	2	<p><u>DLIVORD</u> <u>Detail Live Birth Order</u></p> <p>Sum of live births now living and now dead plus one. If either item is unknown, this item is made unknown.</p> <p>00-31 ... Number of children born alive to mother</p>

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
		99 ... Unknown
102	1	<u>LIVORD9</u> <u>Live Birth Order Recode</u>
		1 ... First Child
		2 ... Second Child
		3 ... Third Child
		4 ... Fourth Child
		5 ... Fifth Child

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
102	1	<u>LIVORD9</u> <u>Live Birth Order Recode (Cont'd)</u> 6 ... Sixth Child 7 ... Seventh Child 8 ... Eighth Child and over 9 ... Unknown or not stated
103-104	2	<u>DTOTORD</u> <u>Detail Total Birth Order</u> Sum of live birth order and other terminations. If either item is unknown, this item is made unknown. 01-40 ... Total number of live births and other terminations 99 ... Unknown
105	1	<u>TOTORD9</u> <u>Total Birth Order Recode</u> 1 ... First Child 2 ... Second Child 3 ... Third Child 4 ... Fourth Child 5 ... Fifth Child 6 ... Sixth Child 7 ... Seventh Child 8 ... Eighth Child and over 9 ... Unknown or not stated
106-107	2	<u>MONPRE</u> <u>Detail Month of Pregnancy Prenatal Care Began</u> 00 ... No prenatal care 01 ... 1st month 02 ... 2nd month 03 ... 3rd month 04 ... 4th month 05 ... 5th month 06 ... 6th month 07 ... 7th month 08 ... 8th month 09 ... 9th month 99 ... Unknown or not stated

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
108	1	<p><u>MPRE6</u> <u>Month Prenatal Care Began Recode 6</u></p> <p>1 ... 1st - 2nd month 2 ... 3rd month 3 ... 4th - 6th month 4 ... 7th - 9th month 5 ... No prenatal care 6 ... Unknown or not stated</p>
109	1	<p><u>MPRE5</u> <u>Month Prenatal Care Began Recode 5</u></p> <p>1 ... 1st Trimester (1st-3rd month) 2 ... 2nd Trimester (4th-6th month) 3 ... 3rd Trimester (7th-9th month) 4 ... No Prenatal Care 5 ... Unknown or not stated</p>
110-111	2	<p><u>NPREVIS</u> <u>Total Number of Prenatal Visits</u></p> <p>00 ... No prenatal visits 01-48 ... Stated number of visits 49 ... 49 or more visits 99 ... Unknown or not stated</p>
112-113	2	<p><u>NPREV12</u> <u>Number of Prenatal Visits Recode</u></p> <p>01 ... No visits 02 ... 1 - 2 visits 03 ... 3 - 4 visits 04 ... 5 - 6 visits 05 ... 7 - 8 visits 06 ... 9 - 10 visits 07 ... 11 - 12 visits 08 ... 13 - 14 visits 09 ... 15 - 16 visits 10 ... 17 - 18 visits 11 ... 19 visits or more 12 ... Unknown or not stated number of visits</p>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
114-121	8	<u>LMPDATE</u> <u>Date Last Normal Menses Began</u>
114-115	2	<u>LMPMON</u> <u>Month Last Normal Menses Began</u>
		01 ... January
		02 ... February
		03 ... March
		04 ... April
		05 ... May
		06 ... June
		07 ... July
		08 ... August
		09 ... September
		10 ... October
		11 ... November
		12 ... December
		99 ... Unknown or not stated month of LMP
116-117	2	<u>LMPDAY</u> <u>Day Last Normal Menses Began</u>
		01-31 ... As applicable to month of LMP
		99 ... Unknown or not stated day of LMP
118-121	4	<u>LMPYR</u> <u>Year Last Normal Menses Began</u>
		1998 ... 1998
		1999 ... 1999
		9999 ... Unknown or not stated year of LMP
122-132	11	<u>R8</u> Item was dropped in 1994
		<u>R8A</u> <u>Reserved Position</u>
133-137	5	<u>Imputed Birthweight</u>

Created beginning with 1995 data

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
133	1	<p><u>BWIMP</u> <u>Imputed Birthweight Flag</u></p> <p>Blank ... Birthweight is not imputed 1 ... Birthweight is imputed</p>
134-137	4	<p><u>Imputed Birthweight</u></p> <p>0227-8165 ... Number of grams</p>
138-152	15	<p><u>R2</u> <u>Reserved Positions</u></p>
153	1	<p><u>FAGERFLG</u> <u>Reported Age of Father Used Flag</u></p> <p>This position is flagged whenever the father's reported age in years is used. The reported age is used, if valid, when age derived from date of birth is not available or when it is less than 10.</p> <p>Blank ... Reported age is not used 1 ... Reported age is used</p>
154-155	2	<p><u>DFAGE</u> <u>Age of Father</u></p> <p>This item is either computed from date of birth of father and of child or is the reported age. This is the age item used in NCHS publications.</p> <p>10-98 ... Age in single years 99 ... Unknown or not stated</p>
156-157	2	<p><u>FAGE11</u> <u>Age of Father Recode</u></p> <p>01 ... Under 15 years 02 ... 15 - 19 years 03 ... 20 - 24 years 04 ... 25 - 29 years 05 ... 30 - 34 years 06 ... 35 - 39 years 07 ... 40 - 44 years 08 ... 45 - 49 years 09 ... 50 - 54 years 10 ... 55 - 98 years</p>

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>																					
		11 ... Not stated																					
158	1	<p><u>ORFATH</u> <u>Hispanic Origin of Father</u></p> <p>Hispanic origin of father is reported by all areas except Puerto Rico, Northern Marianas and American Samoa</p> <table border="0"> <tr><td>0</td><td>...</td><td>Non - Hispanic</td></tr> <tr><td>1</td><td>...</td><td>Mexican</td></tr> <tr><td>2</td><td>...</td><td>Puerto Rican</td></tr> <tr><td>3</td><td>...</td><td>Cuban</td></tr> <tr><td>4</td><td>...</td><td>Central or South American</td></tr> <tr><td>5</td><td>...</td><td>Other and unknown Hispanic</td></tr> <tr><td>9</td><td>...</td><td>Origin unknown or not stated</td></tr> </table>	0	...	Non - Hispanic	1	...	Mexican	2	...	Puerto Rican	3	...	Cuban	4	...	Central or South American	5	...	Other and unknown Hispanic	9	...	Origin unknown or not stated
0	...	Non - Hispanic																					
1	...	Mexican																					
2	...	Puerto Rican																					
3	...	Cuban																					
4	...	Central or South American																					
5	...	Other and unknown Hispanic																					
9	...	Origin unknown or not stated																					

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>																																										
159	1	<p><u>ORRACEF</u> <u>Hispanic Origin and Race of Father Recode</u></p> <p>Hispanic origin of father is reported by all areas except Puerto Rico, Northern Marianas and American Samoa.</p> <table border="0"> <tr><td>1</td><td>...</td><td>Mexican</td></tr> <tr><td>2</td><td>...</td><td>Puerto Rican</td></tr> <tr><td>3</td><td>...</td><td>Cuban</td></tr> <tr><td>4</td><td>...</td><td>Central or South American</td></tr> <tr><td>5</td><td>...</td><td>Other and unknown Hispanic</td></tr> <tr><td>6</td><td>...</td><td>Non - Hispanic White</td></tr> <tr><td>7</td><td>...</td><td>Non - Hispanic Black</td></tr> <tr><td>8</td><td>...</td><td>Non - Hispanic other or unknown race</td></tr> <tr><td>9</td><td>...</td><td>Origin unknown or not stated</td></tr> </table>	1	...	Mexican	2	...	Puerto Rican	3	...	Cuban	4	...	Central or South American	5	...	Other and unknown Hispanic	6	...	Non - Hispanic White	7	...	Non - Hispanic Black	8	...	Non - Hispanic other or unknown race	9	...	Origin unknown or not stated															
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8	...	Non - Hispanic other or unknown race																																										
9	...	Origin unknown or not stated																																										
160-161	2	<p><u>FRACE</u> <u>Race of Father</u> <u>United States occurrence</u></p> <p>Beginning with 1992 data, some areas started reporting additional Asian or Pacific Islander codes for race. Codes 18-68 replace old code 08 for these areas. Code 78 replaces old code 08 for all other areas. For consistency with Census race code 09 (all other races) used prior to 1992 has been Changed to 99.</p> <table border="0"> <tr><td>01</td><td>...</td><td>White</td></tr> <tr><td>02</td><td>...</td><td>Black</td></tr> <tr><td>03</td><td>...</td><td>American Indian (includes Aleuts and Eskimos)</td></tr> <tr><td>04</td><td>...</td><td>Chinese</td></tr> <tr><td>05</td><td>...</td><td>Japanese</td></tr> <tr><td>06</td><td>...</td><td>Hawaiian (includes part-Hawaiian)</td></tr> <tr><td>07</td><td>...</td><td>Filipino</td></tr> <tr><td>18</td><td>...</td><td>Asian Indian</td></tr> <tr><td>28</td><td>...</td><td>Korean</td></tr> <tr><td>38</td><td>...</td><td>Samoan</td></tr> <tr><td>48</td><td>...</td><td>Vietnamese</td></tr> <tr><td>58</td><td>...</td><td>Guamanian</td></tr> <tr><td>68</td><td>...</td><td>Other Asian or Pacific Islander in areas reporting codes 18-58</td></tr> <tr><td>78</td><td>...</td><td>Combined other Asian or Pacific Islander, includes codes 18-68 for areas that do not report them separately</td></tr> </table>	01	...	White	02	...	Black	03	...	American Indian (includes Aleuts and Eskimos)	04	...	Chinese	05	...	Japanese	06	...	Hawaiian (includes part-Hawaiian)	07	...	Filipino	18	...	Asian Indian	28	...	Korean	38	...	Samoan	48	...	Vietnamese	58	...	Guamanian	68	...	Other Asian or Pacific Islander in areas reporting codes 18-58	78	...	Combined other Asian or Pacific Islander, includes codes 18-68 for areas that do not report them separately
01	...	White																																										
02	...	Black																																										
03	...	American Indian (includes Aleuts and Eskimos)																																										
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78	...	Combined other Asian or Pacific Islander, includes codes 18-68 for areas that do not report them separately																																										

1999
Detail Natality Record

**Tape
Location**

**Field
Size**

Item and Code Outline

99 ... Unknown or Not Stated

Puerto Rico occurrence

01 ... White
02 ... Black
00 ... Other races
99 ... Unknown or not stated

Virgin Islands occurrence

01 ... White
02 ... Black

160-161

2

FRACE

Race of Father (Cont'd)

03 ... American Indian (includes Aleuts and
 Eskimos)
04 ... Chinese
05 ... Japanese
06 ... Hawaiian (includes part-Hawaiian)
07 ... Filipino
08 ... Other Asian or Pacific Islander
99 ... Unknown or Not Stated

Guam occurrence

01 ... White
02 ... Black
03 ... American Indian (includes Aleuts and
 Eskimos)
04 ... Chinese
05 ... Japanese
06 ... Hawaiian (includes part-Hawaiian)
07 ... Filipino
08 ... Other Asian or Pacific Islander
58 ... Guamanian
99 ... Unknown or Not Stated

American Samoa occurrence

01 ... White
02 ... Black
03 ... American Indian (includes Aleuts and
 Eskimos)
04 ... Chinese
05 ... Japanese
06 ... Hawaiian (includes part-Hawaiian)
07 ... Filipino
08 ... Other Asian or Pacific Islander

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		99 ... Unknown or Not Stated
		<u>Northern Marianas occurrence</u>
		01 ... White
		02 ... Black
		03 ... American Indian (includes Aleuts and Eskimos)
		04 ... Chinese
		05 ... Japanese
		06 ... Hawaiian (includes part-Hawaiian)
		07 ... Filipino
		08 ... Other Asian or Pacific Islander
162	1	<u>FRACE4</u>
		<u>Race of Father Recode</u>
		1 ... White
		2 ... Races other than White, Black, or unknown
		3 ... Black
		4 ... Unknown or not stated

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
163-165	3	<p><u>R2A</u> <u>Reserved positions</u></p> <p>Item was dropped in 1995</p>
166-167	2	<p><u>DFAGERPT</u> <u>Reported Age of Father</u></p> <p>10-98 ... Age in single years 99 ... Unknown or not stated</p>
168	1	<p><u>FRACEIMP</u> <u>Race of Father Imputation Flag</u></p> <p>(Unknown race of father is not imputed. However, the all other races code is changed to unknown.)</p> <p>Blank ... Race is not changed 3 ... All other races, formerly code 09, is changed to code 99</p>
169	1	<p><u>R3</u> <u>Reserved Position</u></p>
170	1	<p><u>CDOBMIMP</u> <u>Month of Birth of Child Imputation Flag</u></p> <p>Blank ... Month is not imputed 1 ... Month is imputed</p>
171	1	<p><u>RB</u> <u>Reserved Position</u></p>
172-173	2	<p><u>BIRMON</u> <u>Month of Birth</u></p> <p>01 ... January 02 ... February 03 ... March 04 ... April 05 ... May 06 ... June 07 ... July 08 ... August 09 ... September 10 ... October</p>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		11 ... November 12 ... December
174-175	2	<u>RC</u> <u>Reserved Positions</u>
176-179	4	<u>BIRYR</u> <u>Year of Birth</u> 1999 ... 1999
180	1	<u>WEEKDAY</u> <u>Day of Week Child Born</u> 1 ... Sunday 2 ... Monday 3 ... Tuesday 4 ... Wednesday 5 ... Thursday 6 ... Friday 7 ... Saturday
181	1	<u>GESTESTM</u> <u>Clinical Estimate of Gestation Used Flag</u> This position is flagged whenever the clinical estimate of gestation is used. It is used when gestation could not be computed or when the computed gestation is outside the 17-47 code range. Blank ... Clinical Estimate is not used 1 ... Clinical Estimate is used
182	1	<u>GESTIMP</u> <u>Gestation Imputation Flag</u> Blank ... Gestation is not imputed 1 ... Gestation is imputed
183-184	2	<u>DGESTAT</u> <u>Gestation - Detail in Weeks</u> This item is: a) computed using dates of birth of child and last normal menses; b) imputed from LMP date; c) the clinical estimate; or d) unknown when there is insufficient data to impute or no valid

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
		clinical estimate. This is the gestation item used in NCHS publications.
		17-47 ... 17th through 47th week of gestation
		99 ... Unknown
185-186	2	<u>GESTAT10</u> <u>Gestation Recode 10</u>
		01 ... Under 20 weeks
		02 ... 20 - 27 weeks
		03 ... 28 - 31 weeks
		04 ... 32 - 35 weeks
		05 ... 36 weeks
		06 ... 37 - 39 weeks
		07 ... 40 weeks
		08 ... 41 weeks
		09 ... 42 weeks and over
		10 ... Not stated

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
187	1	<u>GESTAT3</u> <u>Gestation Recode 3</u> 1 ... Under 37 weeks 2 ... 37 weeks and over 3 ... Not stated
188	1	<u>CSEXIMP</u> <u>Sex Imputation Flag</u> Blank ... Sex is not imputed 1 ... Sex is imputed
189	1	<u>CSEX</u> <u>Sex</u> 1 ... Male 2 ... Female
190-192	3	<u>RD</u> <u>Reserved Positions</u>
193-196	4	<u>DBIRWT</u> <u>Birth Weight - Detail in Grams</u> 0227-8165 ... Number of grams 9999 ... Not stated birth weight
197-198	2	<u>BIRWT12</u> <u>Birth Weight Recode 12</u> 01 ... 499 grams or less 02 ... 500 - 999 grams 03 ... 1000 - 1499 grams 04 ... 1500 - 1999 grams 05 ... 2000 - 2499 grams 06 ... 2500 - 2999 grams 07 ... 3000 - 3499 grams 08 ... 3500 - 3999 grams 09 ... 4000 - 4499 grams 10 ... 4500 - 4999 grams 11 ... 5000 - 8165 grams 12 ... Not stated
199	1	<u>BIRWT4</u> <u>Birth Weight Recode 4</u>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		1 ... 1499 grams or less
		2 ... 1500 - 2499 grams
		3 ... 2500 - grams or more
		4 ... Unknown or not stated
200	1	<u>PLURIMP</u>
		<u>Plurality Imputation Flag</u>
		Blank ... Plurality is not imputed
		1 ... Plurality is imputed

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
201	1	<p><u>DPLURAL</u> <u>Plurality</u></p> <p>1 ... Single 2 ... Twin 3 ... Triplet 4 ... Quadruplet 5 ... Quintuplet or higher</p>
202-204	3	<p><u>R6</u> <u>Reserved positions</u></p> <p>Item was dropped in 1995</p>
205-206	2	<p><u>FMAPS</u> <u>Five Minute Apgar Score</u></p> <p>Apgar Score is not reported by all areas. See reporting flags.</p> <p>00-10 ... A score of 0-10 99 ... Unknown or not stated</p>
207	1	<p><u>FMAPSR</u> <u>Five Minute Apgar Score Recode</u></p> <p>Apgar Score is not reported by all areas. See reporting flags.</p> <p>1 ... A score of 0-3 2 ... A score of 4-6 3 ... A score of 7-8 4 ... A score of 9-10 5 ... Not stated</p>
208-209	2	<p><u>CLINGEST</u> <u>Clinical Estimate of Gestation</u></p> <p>Clinical estimate is not reported by all areas. See reporting flags.</p> <p>17-47 ... Estimated gestation in weeks 99 ... Unknown or not stated</p>
210-216	7	<p><u>R4</u> <u>Reserved Positions</u></p>

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
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1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
217-306	90	<p><u>MEDINFO</u> <u>Medical and Health Data</u></p> <p>Some States do not report an entire item while other States do not report all of the categories within an item.</p> <p>If an item is not reported, it is indicated by code zero in the appropriate reporting flag.</p> <p>If a category within an item is not reported it is indicated by code 8 in the position for that category.</p>
217-222	6	<p><u>DELMETH</u> <u>Method of Delivery</u></p> <p>Each method is assigned a separate position, and the code structure for each method (position) is:</p> <p>1 ... The method was used 2 ... The method was not used 8 ... Method not on certificate 9 ... Method unknown or not stated</p>
217	1	<p><u>VAGINAL</u> <u>Vaginal</u></p>
218	1	<p><u>VBAC</u> <u>Vaginal birth after previous C-section</u></p>
219	1	<p><u>PRIMAC</u> <u>Primary C -section</u></p>
220	1	<p><u>REPEAC</u> <u>Repeat C -section</u></p>
221	1	<p><u>FORCEP</u> <u>Forceps</u></p>
222	1	<p><u>VACUUM</u> <u>Vacuum</u></p>
223	1	<p><u>R5</u> <u>Reserved Position</u></p>
224	1	<p><u>DELMETH5</u> <u>Method of Delivery Recode</u></p>

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
	1	... Vaginal (excludes vaginal after previous C-section)
	2	... Vaginal birth after previous C-section
	3	... Primary C -section
	4	... Repeat C -section
	5	... Not stated

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
225-241	17	<p><u>MEDRISK</u> <u>Medical Risk Factors</u></p> <p>Each risk factor is assigned a separate position, and the code structure for each risk factor (position) is:</p> <p>1 ... Factor reported 2 ... Factor not reported 8 ... Factor not on certificate 9 ... Factor not classifiable</p>
225	1	<p><u>ANEMIA</u> <u>Anemia (Hct.<30/Hgb.<10)</u></p>
226	1	<p><u>CARDIAC</u> <u>Cardiac disease</u></p>
227	1	<p><u>LUNG</u> <u>Acute or chronic lung disease</u></p>
228	1	<p><u>DIABETES</u> <u>Diabetes</u></p>
229	1	<p><u>HERPES</u> <u>Genital herpes</u></p>
230	1	<p><u>HYDRA</u> <u>Hydramnios/Oligohydramnios</u></p>
231	1	<p><u>HEMO</u> <u>Hemoglobinopathy</u></p>
232	1	<p><u>CHYPER</u> <u>Hypertension, chronic</u></p>
233	1	<p><u>PHYPER</u> <u>Hypertension, pregnancy-associated</u></p>
234	1	<p><u>ECLAMP</u> <u>Eclampsia</u></p>
235	1	<p><u>INCERVIX</u> <u>Incompetent cervix</u></p>
236	1	<p><u>PRE4000</u> <u>Previous infant 4000+ grams</u></p>

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
237	1	<u>PRETERM</u> <u>Previous preterm or small-for-gestational-age infant</u>
238	1	<u>RENAL</u> <u>Renal disease</u>
239	1	<u>RH</u> <u>Rh sensitization</u>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
240	1	<u>UTERINE</u> <u>Uterine bleeding</u>
241	1	<u>OTHERMR</u> <u>Other Medical Risk Factors</u>
242-252	11	<u>OTHERRSK</u> <u>Other Risk Factors for this Pregnancy</u>
242-245	4	<u>TOBACRSK</u> <u>Tobacco Risks</u>
242	1	<u>TOBACCO</u> <u>Tobacco Use During Pregnancy</u>
		1 ... Yes
		2 ... No
		9 ... Unknown or not stated
243-244	2	<u>CIGAR</u> <u>Average Number of Cigarettes Per Day</u>
		00-97 ... As stated
		98 ... 98 or more cigarettes per day
		99 ... Unknown or not stated
245	1	<u>CIGAR6</u> <u>Average Number of Cigarettes Per Day Recode</u>
		0 ... Nonsmoker
		1 ... 1 - 5 cigarettes per day
		2 ... 6 - 10 cigarettes per day
		3 ... 11 - 20 cigarettes per day
		4 ... 21 - 40 cigarettes per day
		5 ... 41 or more cigarettes per day
		6 ... Unknown or not stated
246-249	4	<u>ALCOHRSK</u> <u>Alcohol</u>
246	1	<u>ALCOHOL</u> <u>Alcohol Use During Pregnancy</u>
		1 ... Yes
		2 ... No
		9 ... Unknown or not stated

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
247-249	2	<u>DRINK</u> <u>Average Number of Drinks Per Week</u> 00-97 ... As stated 98 ... 98 or more drinks per week 99 ... Unknown or not stated

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
249	1	<p><u>DRINK5</u> <u>Average Number of Drinks Per Week Recode</u></p> <p>0 ... Non drinker 1 ... 1 drink per week 2 ... 2 drinks per week 3 ... 3 - 4 drinks per week 4 ... 5 or more drinks per week 5 ... Unknown or not stated</p>
250-252	3	<p><u>WTGANRSK</u> <u>Weight Gain During Pregnancy</u></p>
250-251	2	<p><u>WTGAIN</u> <u>Weight Gain</u></p> <p>00-97 ... Stated number of pounds 98 ... 98 pounds or more 99 ... Unknown or not stated</p>
252	1	<p><u>WTGAIN9</u> <u>Weight Gain Recode</u></p> <p>1 ... Less than 16 pounds 2 ... 16 - 20 pounds 3 ... 21 - 25 pounds 4 ... 26 - 30 pounds 5 ... 31 - 35 pounds 6 ... 36 - 40 pounds 7 ... 41 - 45 pounds 8 ... 46 or more pounds 9 ... Unknown or not stated</p>
253-259	7	<p><u>OBSTETRC</u></p> <p><u>Obstetric Procedures</u></p> <p>Each procedure is assigned a separate position, and the code structure for each procedure (position) is:</p> <p>1 ... Procedure reported 2 ... Procedure not reported 8 ... Procedure not on certificate 9 ... Procedure not classifiable</p>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
253	1	<u>AMNIO</u> <u>Amniocentesis</u>
254	1	<u>MONITOR</u> <u>Electronic fetal monitoring</u>
255	1	<u>INDUCT</u> <u>Induction of labor</u>
256	1	<u>STIMULA</u> <u>Stimulation of labor</u>
257	1	<u>TOCOL</u> <u>Tocolysis</u>
258	1	<u>ULTRAS</u> <u>Ultrasound</u>
259	1	<u>OTHEROB</u> <u>Other Obstetric Procedures</u>
260-275	16	<u>LABOR</u> <u>Complications of Labor and/or Delivery</u> Each complication is assigned a separate position, and the code structure for each complication (position) is: 1 ... Complication reported 2 ... Complication not reported 8 ... Complication not on certificate 9 ... Complication not classifiable
260	1	<u>FEBRILE</u> <u>Febrile (>100 degrees F. or 38 degrees C.)</u>
261	1	<u>MECONIUM</u> <u>Meconium, moderate/heavy</u>
262	1	<u>RUPTURE</u> <u>Premature rupture of membrane (>12 hours)</u>
263	1	<u>ABRUPTIO</u> <u>Abruptio placenta</u>
264	1	<u>PREPLACE</u> <u>Placenta previa</u>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
265	1	<u>EXCEBLD</u> <u>Other excessive bleeding</u>
266	1	<u>SEIZURE</u> <u>Seizures during labor</u>
267	1	<u>PRECIP</u> <u>Precipitous labor (<3 hours)</u>
268	1	<u>PROLONG</u> <u>Prolonged labor (>20 hours)</u>
269	1	<u>DYSFUNC</u> <u>Dysfunctional labor</u>
270	1	<u>BREECH</u> <u>Breech/Malpresentation</u>
271	1	<u>CEPHALO</u> <u>Cephalopelvic disproportion</u>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
272	1	<u>CORD</u> <u>Cord prolapse</u>
273	1	<u>ANESTHE</u> <u>Anesthetic complications</u>
274	1	<u>DISTRESS</u> <u>Fetal distress</u>
275	1	<u>OTHERLB</u> <u>Other Complication of Labor and/or Delivery</u>
276-284	9	<u>NEWBORN</u> <u>Abnormal Conditions of the Newborn</u>

Each condition is assigned a separate position, and the code structure for each condition (position) is:

1	...	Condition reported
2	...	Condition not reported
8	...	Condition not on certificate
9	...	Condition not classifiable

276	1	<u>NANEMIA</u> <u>Anemia (Hct.<39/Hgb.<13)</u>
277	1	<u>INJURY</u> <u>Birth injury</u>
278	1	<u>ALCOSYN</u> <u>Fetal alcohol syndrome</u>
279	1	<u>HYALINE</u> <u>Hyaline membrane disease</u>
280	1	<u>MECONSYN</u> <u>Meconium aspiration syndrome</u>
281	1	<u>VENL30</u> <u>Assisted ventilation, less than 30 minutes</u>
282	1	<u>VEN30M</u> <u>Assisted ventilation, 30 minutes or more</u>
283	1	<u>NSEIZ</u> <u>Seizures</u>

1999
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
284	1	<u>OTHERAB</u> <u>Other Abnormal Conditions of the Newborn</u>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
285-306	22	<p><u>CONGENIT</u> <u>Congenital Anomalies</u></p> <p>Each anomaly is assigned a separate position, and the code structure for each anomaly (position) is:</p> <p>1 ... Anomaly reported 2 ... Anomaly not reported 8 ... Anomaly not on certificate 9 ... Anomaly not classifiable</p>
285	1	<p><u>ANEN</u> <u>Anencephalus</u></p>
286	1	<p><u>SPINA</u> <u>Spina bifida/Meningocele</u></p>
287	1	<p><u>HYDRO</u> <u>Hydrocephalus</u></p>
288	1	<p><u>MICROCE</u> <u>Microcephalus</u></p>
289	1	<p><u>NERVOUS</u> <u>Other central nervous system anomalies</u></p>
290	1	<p><u>HEART</u> <u>Heart malformations</u></p>
291	1	<p><u>CIRCUL</u> <u>Other circulatory/respiratory anomalies</u></p>
292	1	<p><u>RECTAL</u> <u>Rectal atresia/stenosis</u></p>
293	1	<p><u>TRACHEO</u> <u>Tracheo - esophageal fistula/Esophageal atresia</u></p>
294	1	<p><u>OMPHALO</u> <u>Omphalocele/Gastroschisis</u></p>
295	1	<p><u>GASTRO</u> <u>Other gastrointestinal anomalies</u></p>
296	1	<p><u>GENITAL</u> <u>Malformed genitalia</u></p>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
297	1	<u>RENALAGE</u> <u>Renal agenesia</u>
298	1	<u>UROGEN</u> <u>Other urogenital anomalies</u>
299	1	<u>CLEFTLP</u> <u>Cleft lip/palate</u>
300	1	<u>ADACTYLY</u> <u>Polydactyly/Syndactyly/Adactyly</u>
301	1	<u>CLUBFOOT</u> <u>Club foot</u>
302	1	<u>HERNIA</u> <u>Diaphragmatic hernia</u>
303	1	<u>MUSCULO</u> <u>Other musculoskeletal/integumental anomalies</u>
304	1	<u>DOWNS</u> <u>Down's syndrome</u>
305	1	<u>CHROMO</u> <u>Other chromosomal anomalies</u>
306	1	<u>OTHERCON</u> <u>Other Congenital Anomalies</u>
307-326	20	<u>FLRES</u> <u>Reporting Flags for Place of Residence</u>

These positions contain flags to indicate whether or not the specified item is included on the birth certificate of the State of residence or of the MSA of residence. The code structure for each flag (position) is:

0	...	The item is not reported
1	...	The item is reported or partially reported.

307	1	<u>ORIGM</u> <u>Origin of mother</u>
308	1	<u>ORIGF</u>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		<u>Origin of father</u>
309	1	<u>EDUCM</u> <u>Education of mother</u>
310	1	<u>EDUCF</u> <u>Education of father</u>
311	1	<u>GESTE</u> <u>Clinical estimate of gestation</u>
312	1	<u>R6A</u> <u>Reserved position</u>
313	1	<u>FMAPSRF</u> <u>5 - minute Apgar score</u>
314	1	<u>DELMETRF</u> <u>Method of delivery</u>
315	1	<u>MEDRSK</u> <u>Medical risk factors</u>
316	1	<u>TOBUSE</u> <u>Tobacco use</u>
317	1	<u>ALCUSE</u> <u>Alcohol use</u>
318	1	<u>WTGN</u> <u>Weight gain</u>
319	1	<u>OBSTRC</u> <u>Obstetric procedures</u>
320	1	<u>CLABOR</u> <u>Complications of labor and/or delivery</u>
321	1	<u>ABNML</u> <u>Abnormal conditions of newborn</u>
322	1	<u>CONGAN</u> <u>Congenital anomalies</u>
323	1	<u>R6</u> <u>Reserved Position</u>

1999
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
324	1	<u>EDUCMSA</u> <u>Education of Mother (Based on MSA)</u>
325	1	<u>APIFLAG</u> <u>Race codes 18-68 reported (beginning with 1992 data)</u>
326-346	21	<u>R7</u> <u>Reserved positions</u>
347-349	3	<u>SMSARES</u> <u>PSMA/MSA of Residence (NCHS)</u>

Primary Metropolitan Statistical Areas and Metropolitan Statistical Areas are those defined by the U.S. Office of Management and Budget (OMB) as of June 30, 1990. For New England, the New England County Metropolitan Areas (NECMA's) are used.

Further back in this document is a list of PMSA's, MSA's, NECMA's, and their component counties.

000	...	Nonmetropolitan counties
001-320	...	Code range
999	...	Area of less than 100,000 population
ZZZ	...	Foreign residents

1999
Detail Natality Record

Tape
Location

Field
Size

Item and Code Outline

350

1

POPSMAS

PMSA/MSA Population Size

Based on 1990 Census county population counts

1	...	Area of 250,000 or more
2	...	Area of 100,000 to 250,000
9	...	Area of less than 100,000 or nonmetropolitan area
Z	...	Foreign resident

Vital Statistics Geographic Code Outline for the United States

The following pages show in detail the geographic codes used by the Division of Vital Statistics in the processing of vital event data occurring in the United States. When an event occurs to a nonresident of the United States, residence data are coded only to the "State" level; several western hemisphere countries or the remainder of the world are uniquely identified. Along with the Division of Vital Statistics codes the Federal Information Processing Standards (FIPS) codes are shown for several items. Both sets of codes appear on the vital event public-use files. The Metropolitan Statistical Area codes are effective with the 1996 data year and are based on the 1990 Census.

To aid the user in interpreting the geographic codes, a brief explanation of the codes and of the column headings/abbreviations shown on the following pages are:

State (St): Each State and the District of Columbia are numbered alphabetically. In addition, several unique codes are used to identify nonresidents of the U.S.

County (Cnty): Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State.

P/MSA: Primary metropolitan statistical areas and metropolitan statistical areas are those established by the U.S. Office of Management and Budget (OMB) using 1990 Census population counts. For New England, the New England County Metropolitan Areas (NECMA) are used.

M/NM: Metropolitan counties (code 1) are component counties of P/MSA's. Nonmetropolitan counties (code 2) are not part of any P/MSA.

City or place: Cities/places are numbered alphabetically within each State and identify each city with a population of 10,000 or more in 1990.

P/S: Population size code for city of residence based on the 1990 Census. Refer to the code outline given earlier in this document for specific codes and meanings.

Name: Each State, county, and city name is listed along with its respective code. In addition, places used to identify nonresidents of the U.S. are also listed along with their codes.

FIPS: For an explanation of FIPS codes, reference should be made to various National Institute of Standards & Technology (NITS) publications.

So! How do I find Yavapai county, Arizona; or Tupelo city, Mississippi?

Since counties and cities/places are numbered within State, the State and county or the State and city/places codes must be used to select these areas. It is most helpful if the county is known when looking for a particular city since areas are shown by State, county, and city.

Yavapai county, Arizona - State and county codes NCHS: 03 014; FIPS: 04 025.

Tupelo, Mississippi - State and city/place codes NCHS: 25 032; FIPS: 28 74840; or State, county, city/place codes NCHS: 25 041 032; FIPS: 28 081 74840.

Vital Statistics Geographic Code Outline for Puerto Rico, Virgin Islands, Guam, American Samoa and Northern Marianas

The following pages show in detail the geographic codes used by the Division of Vital Statistics in the processing of vital event data occurring in Puerto Rico, the Virgin Islands, or Guam. When an event occurs to a nonresident of these areas, residence data are coded only to the "State" level; each U.S. state, several western hemisphere countries or the remainder of the world are uniquely identified. Along with the Division of Vital Statistics codes, the Federal Information Processing Standards (FIPS) codes are shown for several items. Both sets of codes appear on the vital event public-use files. Codes are effective with the 1994 data year and are based on results of the 1990 Census.

To aid the user in interpreting the geographic codes, a brief explanation of the codes and of the column headings/abbreviations shown on the following pages are:

Puerto Rico:

State (St): Puerto Rico has its own unique code. In addition, several unique codes are used to identify nonresidents of Puerto Rico.

County (Cnty): Each municipio (county equivalent) is numbered alphabetically.

P/MSA: Primary metropolitan statistical areas and metropolitan statistical areas are those established by the U.S. Office of Management and Budget (OMB) using 1990 Census population counts.

M/NM: Metropolitan counties (code 1) are component counties of P/MSA's. Nonmetropolitan counties (code 2) are not part of any P/MSA.

City or Place: No city/places in Puerto Rico are identified.

Name: Puerto Rico and each municipio are listed along with their respective codes. In addition, places used to identify nonresidents of Puerto Rico are also listed along with their codes.

FIPS: For an explanation of FIPS codes, reference should be made to various National Institute of Standards and Technology (NIST) publications.

Virgin Islands:

State (St): The Virgin Islands has its own unique code. In addition, several unique codes are used to identify nonresidents of the Virgin Islands.

County (Cnty): Several Islands (county equivalent) are numbered alphabetically.

P/MSA: None are identified in the Virgin Islands.

M/NM: No metropolitan areas are identified for the Virgin Islands.

City or Place: City/places are numbered alphabetically within each State and identify each city with a population of 10,000 or more in 1990.

P/S: Population size code for city of residence based on the 1990 Census. Refer to the code outline given earlier in this document for specific codes and meanings.

Name: The Virgin Islands as a whole and several islands are listed along with their respective codes. In addition, places used to identify nonresidents of the Virgin Islands are also listed along with their codes.

Guam:

State (St): Guam has its own unique code. In addition, several unique codes are used to identify nonresidents of Guam.

County (Cnty): None are identified in Guam

P/MSA: None are identified in Guam.

M/NM: No metropolitan areas are identified for Guam.

City or Place: None are identified in Guam.

P/S: No population size groups are identified for Guam.

Name: Guam as a whole is listed along with its respective code. In addition, places used to identify nonresidents of Guam are also listed along with their codes.

American Samoa:

State (St): American Samoa has its own unique code. In addition, several unique codes are used to identify nonresidents of American Samoa.

County (Cnty): None are identified in American Samoa

P/MSA: None are identified in American Samoa.

M/NM: No metropolitan areas are identified for American Samoa.

City or Place: None are identified in American Samoa.

P/S: No population size groups are identified for American Samoa.

Name: American Samoa as a whole is listed along with its respective code. In addition, places used to identify nonresidents of American Samoa are also listed along with their codes.

Northern Marianas:

State (St): Northern Marianas has its own unique code. In addition, several unique codes are used to identify nonresidents of Northern Marianas.

County (Cnty): None are identified in Northern Marianas.

P/MSA: None are identified in Northern Marianas.

M/NM: No metropolitan areas are identified for Northern Marianas.

City or Place: None are identified in Northern Marianas.

P/S: No population size groups are identified for Northern Marianas.

Name: Northern Marianas as a whole is listed along with its respective code. In addition, places used to identify nonresidents of Northern Marianas are also listed along with their codes.

Vital Statistics Geographic Code Outline for the United States

The following pages show in detail the geographic codes used by the Division of Vital Statistics in the processing of vital event data occurring in the United States. When an event occurs to a nonresident of the United States, residence data are coded only to the "State" level; several western hemisphere countries or the remainder of the world are uniquely identified. Along with the Division of Vital Statistics codes, the Federal Information Processing Standards (FIPS) codes are shown for several items. Both sets of codes appear on the vital event public-use files. Codes are effective with the 1998 data year and are based on the 1990 Census.

To aid the user in interpreting the geographic codes, a brief explanation of the codes and of the column headings/abbreviations shown on the following pages are:

State (St): Each State and the District of Columbia are numbered alphabetically. In addition, several unique codes are used to identify nonresidents of the U.S.

County (Cnty): Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each state.

P/MSA: Primary metropolitan statistical areas and metropolitan statistical areas are those established by the U.S. Office of Management and Budget (OMB) using 1990 Census population counts. For New England, the New England County Metropolitan Areas (NECMA) are used.

M/NM: Metropolitan counties (code 1) are component counties of P/MSA's. Nonmetropolitan counties (code 2) are not part of any P/MSA.

City or Place: Cities/Places are numbered alphabetically within each State and identify each city with a population of 10,000 or more in 1990.

P/S: Population size code for city/place of residence based on the 1990 Census. Refer to the code outline given earlier in this document for specific codes and meanings.

Name: Each State, county, and city name is listed along with its respective code. In addition, places used to identify nonresidents of the U.S. are also listed along with their codes.

FIPS: For an explanation of FIPS codes, reference should be made to various National Institute of Standards and Technology (NIST) publications.

So! How do I find Yavapai county, Arizona; or Tupelo city, Mississippi?

Since counties and cities/places are numbered within State, the State and county or the State and city/places codes must be used to select these areas. It is most helpful if the county is known when looking for a particular city since areas are shown by State, county, and city/place.

Yavapai county, Arizona - State and county codes NCHS: 03 014; FIPS: 04 025.

Tupelo, Mississippi - State and city/place codes NCHS: 25 032; FIPS: 28 74840; or State, county, city/place codes NCHS: 25 041 032; FIPS: 28 081 74840.

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
01						Alabama	01				
	001	188	1			Autauga		001	5	5240	
				035	6	Prattville, part					62328
				999	9	Balance of county					99999
	002	184	1			Baldwin		003	4	5160	
				010	6	Daphne					19648
				999	9	Balance of county					99999
	003	000	2			Barbour		005	5	0000	
				014	6	Eufaula					24568
				999	9	Balance of county					99999
	004	000	2			Bibb		007	6	0000	
	005	032	1			Blount		009	5	1000	
	006	000	2			Bullock		011	6	0000	
	007	000	2			Butler		013	6	0000	
	008	012	1			Calhoun		015	3	0450	
				004	5	Anniston					01852
				024	6	Jacksonville					38272
				999	9	Balance of county					99999
	009	000	2			Chambers		017	5	0000	
	010	000	2			Cherokee		019	6	0000	
	011	000	2			Chilton		021	5	0000	
	012	000	2			Choctaw		023	6	0000	
	013	000	2			Clarke		025	5	0000	
	014	000	2			Clay		027	6	0000	
	015	000	2			Cleburne		029	6	0000	
	016	000	2			Coffee		031	5	0000	
				013	6	Enterprise, part					24184
				999	9	Balance of county					99999
	017	094	1			Colbert		033	4	2650	
				040	6	Sheffield					69648
				999	9	Balance of county					99999
	018	000	2			Conecuh		035	6	0000	
	019	000	2			Coosa		037	6	0000	
	020	000	2			Covington		039	5	0000	
	021	000	2			Crenshaw		041	6	0000	
	022	000	2			Cullman		043	4	0000	
				009	6	Cullman					18976
				999	9	Balance of county					99999
	023	077	1			Dale		045	5	2180	
				012	4	Dothan, part					21184
				013	6	Enterprise, part					24184
				033	6	Ozark					57648
				999	9	Balance of county					99999
	024	000	2			Dallas		047	5	0000	
				039	6	Selma					69120
				999	9	Balance of county					99999
	025	000	2			De Kalb		049	4	0000	
				017	6	Fort Payne					27616
				999	9	Balance of county					99999
	026	188	1			Elmore		051	5	5240	
				035	6	Prattville, part					62328
				999	9	Balance of county					99999
	027	000	2			Escambia		053	5	0000	
	028	105	1			Etowah		055	4	2880	
				018	5	Gadsden					28696
				999	9	Balance of county					99999
	029	000	2			Fayette		057	6	0000	
	030	000	2			Franklin		059	5	0000	
	031	000	2			Geneva		061	6	0000	
	032	000	2			Greene		063	6	0000	
	033	000	2			Hale		065	6	0000	
	034	000	2			Henry		067	6	0000	
	035	077	1			Houston		069	4	2180	
				012	4	Dothan, part					21184
				999	9	Balance of county					99999
	036	000	2			Jackson		071	5	0000	
				038	6	Scottsboro					68736
				999	9	Balance of county					99999
	037	032	1			Jefferson		073	1	1000	
				007	5	Bessemer					05980
				008	2	Birmingham, part					07000
				015	6	Fairfield					25120
				020	6	Homewood					35800
				021	5	Hoover, part					35896
				022	6	Hueytown					36448

Vital Statistics Codes					FIPS Codes				
St Cnty	P/MSA	M/NM	City	P/S	Area Names	St Cnty	P/S	P/MSA	Place
01					Alabama	01			
	037				Jefferson, con.	073	1	1000	
			030	6	Mountain Brook				51696
			046	6	Vestavia Hills				78552
			999	9	Leeds, part				99999
			999	9	Balance of county				99999
	038	000		2	Lamar	075	6	0000	
	039	094		1	Lauderdale	077	4	2650	
			016	5	Florence				26896
			999	9	Balance of county				99999
	040	072		1	Lawrence	079	5	2030	
	041	000		2	Lee	081	4	0000	
			006	5	Auburn				03076
			032	6	Opelika				57048
			034	5	Phenix City, part				59472
			999	9	Balance of county				99999
	042	129		1	Limestone	083	4	3440	
			005	6	Athens				02956
			011	5	Decatur, part				20104
			023	3	Huntsville, part				37000
			027	6	Madison, part				45784
			999	9	Balance of county				99999
	043	000		2	Lowndes	085	6	0000	
	044	000		2	Macon	087	6	0000	
			045	6	Tuskegee				77304
			999	9	Balance of county				99999
	045	129		1	Madison	089	3	3440	
			023	3	Huntsville, part				37000
			027	6	Madison, part				45784
			999	9	Balance of county				99999
	046	000		2	Marengo	091	6	0000	
	047	000		2	Marion	093	5	0000	
	048	000		2	Marshall	095	4	0000	
			002	6	Albertville				00988
			999	9	Balance of county				99999
	049	184		1	Mobile	097	2	5160	
			028	3	Mobile				50000
			036	5	Prichard				62496
			037	6	Saraland				68160
			999	9	Balance of county				99999
	050	000		2	Monroe	099	6	0000	
	051	188		1	Montgomery	101	3	5240	
			029	3	Montgomery				51000
			999	9	Balance of county				99999
	052	072		1	Morgan	103	3	2030	
			011	5	Decatur, part				20104
			019	6	Hartselle				33448
			999	9	Balance of county				99999
	053	000		2	Perry	105	6	0000	
	054	000		2	Pickens	107	6	0000	
	055	000		2	Pike	109	5	0000	
			043	6	Troy				76920
			999	9	Balance of county				99999
	056	000		2	Randolph	111	6	0000	
	057	063		1	Russell	113	5	1800	
			034	5	Phenix City, part				59472
			999	9	Balance of county				99999
	058	032		1	St. Clair	115	4	1000	
			999	9	Balance of county				99999
			999	9	Leeds, part				99999
	059	032		1	Shelby	117	4	1000	
			001	6	Alabaster				00820
			008	2	Birmingham, part				07000
			021	5	Hoover, part				35896
			999	9	Leeds, part				99999
			999	9	Balance of county				99999
	060	000		2	Sumter	119	6	0000	
	061	000		2	Talladega	121	4	0000	
			041	6	Sylacauga				74352
			042	6	Talladega				74592
			999	9	Balance of county				99999
	062	000		2	Tallapoosa	123	5	0000	
			003	6	Alexander City				01132
			999	9	Balance of county				99999
	063	287		1	Tuscaloosa	125	3	8600	
			031	6	Northport				55200

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
01						Alabama	01				
	063					Tuscaloosa, con.		125	3	8600	
				044	4	Tuscaloosa					77256
				999	9	Balance of county					99999
	064	000	2			Walker		127	4	0000	
				025	6	Jasper					38416
				999	9	Balance of county					99999
	065	000	2	999	9	Washington		129	6	0000	
	066	000	2	999	9	Wilcox		131	6	0000	
	067	000	2	999	9	Winston		133	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
02						Alaska	02				
001	000	2	999	9		Aleutians East	013	6	0000		
002	000	2	999	9		Aleutians West	016	6	0000		
003	010	1	001	3		Anchorage, coext. with Anchorage city	020	3	0380	03000	
004	000	2	999	9		Bethel	050	6	0000		
005	000	2	999	9		Bristol Bay	060	6	0000		
006	000	2	999	9		Dillingham	070	6	0000		
007	000	2				Fairbanks North Star	090	4	0000		
				002	5	Fairbanks					24230
				999	9	Balance of area					99999
008	000	2	999	9		Haines	100	6	0000		
009	000	2	003	5		Juneau, coext. with Juneau city	110	5	0000	36400	
010	000	2	999	9		Kenai Peninsula	122	5	0000		
011	000	2	999	9		Ketchikan Gateway	130	6	0000		
012	000	2	999	9		Kodiak Island	150	6	0000		
013	000	2	999	9		Lake and Peninsula	164	6	0000		
014	000	2	999	9		Matanuska-Susitna	170	5	0000		
015	000	2	999	9		Nome	180	6	0000		
016	000	2	999	9		North Slope	185	6	0000		
017	000	2	999	9		Northwest Arctic	188	6	0000		
018	000	2	999	9		Prince of Wales-Outer Ketchikan	201	6	0000		
019	000	2	999	9		Sitka	220	6	0000		
020	000	2	999	9		Skagway-Hoonah-Angoon	232	6	0000		
021	000	2	999	9		Southeast Fairbanks	240	6	0000		
022	000	2	999	9		Valdez-Cordova	261	6	0000		
023	000	2	999	9		Wade Hampton	270	6	0000		
024	000	2	999	9		Wrangell-Petersburg	280	6	0000		
025	000	2	999	9		Yakutat	282	6	0000		
026	000	2	999	9		Yukon-Koyukuk	290	6	0000		

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
03						Arizona	04				
	001	000	2	999	9	Apache		001	4	0000	
	002	000	2			Cochise		003	4	0000	
				006	6	Douglas					20050
				020	5	Sierra Vista					66820
				999	9	Balance of county					99999
	003	000	2			Coconino		005	4	0000	
				007	5	Flagstaff					23620
				999	9	Balance of county					99999
	004	000	2	999	9	Gila		007	5	0000	
	005	000	2	999	9	Graham		009	5	0000	
	006	000	2	999	9	Greenlee		011	6	0000	
	007	000	2	999	9	La Paz		012	6	0000	
	008	215	1			Maricopa		013	0	6200	
				001	6	Apache Junction, part					02830
				002	6	Avondale					04720
				005	4	Chandler					12000
				008	6	Fountain Hills					25300
				009	5	Gilbert					27400
				010	3	Glendale					27820
				013	2	Mesa					46000
				015	6	Paradise Valley					52930
				016	4	Peoria					54050
				017	1	Phoenix					55000
				019	3	Scottsdale					65000
				021	3	Tempe					73000
				999	9	Balance of county					99999
	009	159	1			Mohave		015	4	4120	
				003	6	Bullhead City					08255
				011	6	Kingman					37620
				012	6	Lake Havasu City					39370
				999	9	Balance of county					99999
	010	000	2	999	9	Navajo		017	4	0000	
	011	285	1			Pima		019	1	8520	
				022	2	Tucson					77000
				999	9	Balance of county					99999
	012	215	1			Pinal		021	3	6200	
				001	6	Apache Junction, part					02830
				004	6	Casa Grande					10530
				999	9	Balance of county					99999
	013	000	2			Santa Cruz		023	5	0000	
				014	6	Nogales					49640
				999	9	Balance of county					99999
	014	000	2			Yavapai		025	3	0000	
				018	5	Prescott					57380
				999	9	Balance of county					99999
	015	311	1			Yuma		027	3	9360	
				023	4	Yuma					85540
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
04						Arkansas	05				
	047			999	9	Mississippi, con.		093	4	0000	
				999	9	Balance of county					99999
	048	000	2	999	9	Monroe		095	6	0000	
	049	000	2	999	9	Montgomery		097	6	0000	
	050	000	2	999	9	Nevada		099	6	0000	
	051	000	2	999	9	Newton		101	6	0000	
	052	000	2			Ouachita		103	5	0000	
				005	6	Camden					10720
				999	9	Balance of county					99999
	053	000	2	999	9	Perry		105	6	0000	
	054	000	2			Phillips		107	5	0000	
				027	6	West Helena					74450
				999	9	Balance of county					99999
	055	000	2	999	9	Pike		109	6	0000	
	056	000	2	999	9	Poinsett		111	6	0000	
	057	000	2	999	9	Polk		113	6	0000	
	058	000	2			Pope		115	5	0000	
				020	6	Russellville					61670
				999	9	Balance of county					99999
	059	000	2	999	9	Prairie		117	6	0000	
	060	166	1			Pulaski		119	2	4400	
				012	5	Jacksonville					34750
				014	3	Little Rock					41000
				016	4	North Little Rock					50450
				022	6	Sherwood					63800
				999	9	Balance of county					99999
	061	000	2	999	9	Randolph		121	6	0000	
	062	000	2			St. Francis		123	5	0000	
				009	6	Forrest City					24430
				999	9	Balance of county					99999
	063	166	1			Saline		125	4	4400	
				002	6	Benton					05290
				999	9	Balance of county					99999
	064	000	2	999	9	Scott		127	6	0000	
	065	000	2	999	9	Searcy		129	6	0000	
	066	100	1			Sebastian		131	4	2720	
				010	4	Fort Smith					24550
				999	9	Balance of county					99999
	067	000	2	999	9	Sevier		133	6	0000	
	068	000	2	999	9	Sharp		135	6	0000	
	069	000	2	999	9	Stone		137	6	0000	
	070	000	2			Union		139	5	0000	
				007	6	El Dorado					21070
				999	9	Balance of county					99999
	071	000	2	999	9	Van Buren		141	6	0000	
	072	092	1			Washington		143	3	2580	
				008	5	Fayetteville					23290
				023	5	Springdale, part					66080
				999	9	Balance of county					99999
	073	000	2			White		145	4	0000	
				021	6	Searcy					63020
				999	9	Balance of county					99999
	074	000	2	999	9	Woodruff		147	6	0000	
	075	000	2	999	9	Yell		149	6	0000	

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
05						California	06				
	001	201	1			Alameda		001	0	5775	
				002	4	Alameda					00562
				003	6	Albany					00674
				025	3	Berkeley					06000
				073	6	Dublin					20018
				090	3	Fremont					26000
				103	3	Hayward					33000
				135	4	Livermore					41992
				173	5	Newark					50916
				179	2	Oakland					53000
				199	6	Piedmont					56938
				204	4	Pleasanton					57792
				242	4	San Leandro					68084
				287	4	Union City					81204
				999	9	Balance of county					99999
	002	000	2	999	9	Alpine		003	6	0000	
	003	000	2	999	9	Amador		005	5	0000	
	004	056	1			Butte		007	3	1620	
				042	5	Chico					13014
				184	6	Oroville					54386
				193	5	Paradise					55520
				999	9	Balance of county					99999
	005	000	2	999	9	Calaveras		009	5	0000	
	006	000	2	999	9	Colusa		011	6	0000	
	007	201	1			Contra Costa		013	1	5775	
				006	4	Antioch					02252
				052	3	Concord					16000
				064	5	Danville					17988
				077	6	El Cerrito					21796
				105	6	Hercules					33308
				118	6	Lafayette					39122
				151	5	Martinez					46114
				167	6	Moraga Town					49194
				183	6	Orinda					54232
				200	6	Pinole					57288
				201	5	Pittsburg					57456
				203	5	Pleasant Hill					57764
				218	4	Richmond					60620
				247	5	San Pablo					68294
				249	5	San Ramon					68378
				295	4	Walnut Creek					83346
				999	9	Balance of county					99999
	008	000	2	999	9	Del Norte		015	6	0000	
	009	239	1			El Dorado		017	3	6920	
				270	6	South Lake Tahoe					73108
				999	9	Balance of county					99999
	010	104	1			Fresno		019	1	2840	
				047	4	Clovis					14218
				091	2	Fresno					27000
				216	6	Reedley					60242
				238	6	Sanger					67056
				264	6	Selma					70882
				999	9	Balance of county					99999
	011	000	2	999	9	Glenn		021	6	0000	
	012	000	2			Humboldt		023	3	0000	
				009	6	Arcata					02476
				083	5	Eureka					23042
				999	9	Balance of county					99999
	013	000	2			Imperial		025	3	0000	
				027	6	Brawley					08058
				032	6	Calexico					09710
				076	5	El Centro					21782
				999	9	Balance of county					99999
	014	000	2	999	9	Inyo		027	6	0000	
	015	020	1			Kern		029	1	0680	
				016	3	Bakersfield					03526
				066	6	Delano					18394
				219	5	Ridgecrest					60704
				296	6	Wasco					83542
				999	9	Balance of county					99999
	016	000	2			Kings		031	3	0000	
				053	6	Corcoran					16224
				100	5	Hanford					31960
				134	6	Lemoore					41152

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
05						California	06				
	016			999	9	Kings, con.		031	3	0000	99999
						Balance of county					
	017	000	2	046	6	Lake		033	4	0000	13945
				999	9	Clearlake					99999
						Balance of county					
	018	000	2	999	9	Lassen		035	5	0000	
	019	168	1			Los Angeles		037	0	4480	
				001	6	Agoura Hills					00394
				004	4	Alhambra					00884
				008	5	Arcadia					02462
				011	6	Artesia					02896
				015	5	Azusa					03386
				017	4	Baldwin Park					03666
				020	5	Bell					04870
				021	4	Bellflower					04982
				022	5	Bell Gardens					04996
				026	5	Beverly Hills					06308
				030	4	Burbank					08954
				038	4	Carson					11530
				041	4	Cerritos					12552
				045	5	Claremont					13756
				050	6	Commerce					14974
				051	4	Compton					15044
				057	5	Covina					16742
				058	6	Cudahy					17498
				059	5	Culver City					17568
				068	4	Diamond Bar					19192
				071	4	Downey					19766
				072	6	Duarte					19980
				078	3	El Monte					22230
				080	6	El Segundo					22412
				093	5	Gardena					28168
				096	3	Glendale					30000
				097	5	Glendora					30014
				101	6	Hawaiian Gardens					32506
				102	4	Hawthorne					32548
				106	6	Hermosa Beach					33364
				112	4	Huntington Park					36056
				115	3	Inglewood					36546
				117	6	La Canada Flintridge					39003
				123	4	Lakewood					39892
				125	5	La Mirada					40032
				126	4	Lancaster					40130
				128	5	La Puente					40340
				131	5	La Verne					40830
				132	5	Lawndale					40886
				138	6	Lomita					42468
				140	2	Long Beach					43000
				143	0	Los Angeles					44000
				146	4	Lynwood					44574
				148	5	Manhattan Beach					45400
				153	5	Maywood					46492
				161	5	Monrovia					48648
				163	4	Montebello					48816
				165	4	Monterey Park					48914
				176	4	Norwalk					52526
				188	4	Palmdale					55156
				192	6	Palos Verdes Estates					55380
				194	5	Paramount					55618
				195	3	Pasadena					56000
				198	4	Pico Rivera					56924
				205	3	Pomona					58072
				210	5	Rancho Palos Verdes					59514
				214	4	Redondo Beach					60018
				223	4	Rosemead					62896
				234	5	San Dimas					66070
				235	6	San Fernando					66140
				237	5	San Gabriel					67042
				245	6	San Marino					68224
				253	3	Santa Clarita					69088
				255	6	Santa Fe Springs					69154
				257	4	Santa Monica					70000
				265	6	Sierra Madre					71806
				268	6	South El Monte					72996

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
05						California	06				
	019					Los Angeles, con.	037	0		4480	
				269	4	South Gate					73080
				271	6	South Pasadena					73220
				278	5	Temple City					78148
				280	3	Torrance					80000
				294	5	Walnut					83332
				298	4	West Covina					84200
				299	5	West Hollywood					84410
				302	4	Whittier					85292
				999	9	Balance of county					99999
	020	104	1			Madera	039	4		2840	
				147	5	Madera					45022
				999	9	Balance of county					99999
	021	250	1			Marin	041	3		7360	
				130	6	Larkspur					40438
				157	6	Mill Valley					47710
				177	5	Novato					52582
				227	6	San Anselmo					64434
				248	5	San Rafael					68364
				999	9	Balance of county					99999
	022	000	2	999	9	Mariposa	043	6		0000	
	023	000	2			Mendocino	045	4		0000	
				286	6	Ukiah					81134
				999	9	Balance of county					99999
	024	179	1			Merced	047	3		4940	
				013	6	Atwater					03162
				144	6	Los Banos					44028
				155	4	Merced					46898
				999	9	Balance of county					99999
	025	000	2	999	9	Modoc	049	6		0000	
	026	000	2	999	9	Mono	051	6		0000	
	027	245	1			Monterey	053	2		7120	
				150	5	Marina					45778
				164	5	Monterey					48872
				187	6	Pacific Grove					54848
				226	3	Salinas					64224
				263	5	Seaside					70742
				999	9	Balance of county					99999
	028	290	1			Napa	055	3		8720	
				171	4	Napa					50258
				999	9	Balance of county					99999
	029	000	2	999	9	Nevada	057	4		0000	
	030	207	1			Orange	059	0		5945	
				005	2	Anaheim					02000
				028	5	Brea					08100
				029	4	Buena Park					08786
				056	4	Costa Mesa					16532
				061	5	Cypress					17750
				063	5	Dana Point					17946
				089	4	Fountain Valley					25380
				092	3	Fullerton					28000
				094	3	Garden Grove					29000
				111	3	Huntington Beach					36000
				116	3	Irvine					36770
				119	6	Laguna Beach					39178
				120	5	Laguna Niguel					39248
				121	4	La Habra					39290
				127	6	La Palma					40256
				141	6	Los Alamitos					43224
				159	4	Mission Viejo					48256
				174	4	Newport Beach					51182
				182	3	Orange					53980
				202	5	Placentia					57526
				232	5	San Clemente					65084
				241	5	San Juan Capistrano					68028
				250	2	Santa Ana					69000
				262	5	Seal Beach					70686
				273	5	Stanton					73962
				284	4	Tustin					80854
				300	4	Westminster					84550
				304	4	Yorba Linda					86832
				999	9	Balance of county					99999
	031	239	1			Placer	061	3		6920	
				014	6	Auburn					03204

Vital Statistics Codes					FIPS Codes				
St Cnty	P/MSA	M/NM	City	P/S	Area Names	St Cnty	P/S	P/MSA	Place
05					California	06			
	031				Placer, con.	061	3	6920	
			221	6	Rocklin				62364
			224	5	Roseville				62938
			999	9	Balance of county				99999
	032	000	2	999	Plumas	063	6	0000	
	033	233	1		Riverside	065	0	6780	
			018	6	Banning				03820
			039	5	Cathedral City				12048
			048	6	Coachella				14260
			054	4	Corona				16350
			067	6	Desert Hot Springs				18996
			104	5	Hemet				33182
			114	5	Indio				36448
			122	6	Lake Elsinore				39486
			129	6	La Quinta				40354
			168	3	Moreno Valley				49270
			175	6	Norco				51560
			189	6	Palm Desert				55184
			190	5	Palm Springs				55254
			196	6	Perris				56700
			220	3	Riverside				62000
			239	6	San Jacinto				67112
			277	5	Temecula				78120
			999	9	Balance of county				99999
	034	239	1		Sacramento	067	0	6920	
			086	5	Folsom				24638
			225	2	Sacramento				64000
			999	9	Balance of county				99999
	035	000	2		San Benito	069	5	0000	
			110	6	Hollister				34120
			999	9	Balance of county				99999
	036	233	1		San Bernardino	071	0	6780	
			007	5	Apple Valley				02364
			019	6	Barstow				04030
			043	4	Chino				13210
			049	5	Colton				14890
			087	4	Fontana				24680
			098	6	Grand Terrace				30658
			107	4	Hesperia				33434
			108	5	Highland				33588
			137	6	Loma Linda				42370
			162	5	Montclair				48788
			181	3	Ontario				53896
			209	3	Rancho Cucamonga				59451
			213	4	Redlands				59962
			217	4	Rialto				60466
			228	3	San Bernardino				65000
			285	6	Twentynine Palms				80994
			288	4	Upland				81344
			291	5	Victorville				82590
			306	5	Yucaipa				87042
			999	9	Balance of county				99999
	037	249	1		San Diego	073	0	7320	
			036	4	Carlsbad				11194
			044	3	Chula Vista				13392
			055	5	Coronado				16378
			075	4	El Cajon				21712
			081	4	Encinitas				22678
			082	3	Escondido				22804
			113	5	Imperial Beach				36294
			124	4	La Mesa				40004
			133	6	Lemon Grove				41124
			172	4	National City				50398
			180	3	Oceanside				53322
			208	5	Poway				58520
			233	0	San Diego				66000
			244	5	San Marcos				68196
			260	4	Santee				70224
			267	6	Solana Beach				72506
			293	4	Vista				82996
			999	9	Balance of county				99999
	038	250	1	236	San Francisco, coext. with San Francisco	075	1	7360	67000
	039	274	1		San Joaquin	077	2	8120	
			136	4	Lodi				42202

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
05						California	06				
	039					San Joaquin, con.		077	2	8120	
				149	5	Manteca					45484
				274	3	Stockton					75000
				281	5	Tracy					80238
				999	9	Balance of county					99999
	040	252	1			San Luis Obispo		079	3	7460	
				010	6	Arroyo Grande					02868
				012	6	Atascadero					03064
				079	6	El Paso de Robles					22300
				099	6	Grover City					31400
				243	5	San Luis Obispo					68154
				999	9	Balance of county					99999
	041	250	1			San Mateo		081	1	7360	
				023	6	Belmont					05108
				031	5	Burlingame					09066
				062	4	Daly City					17918
				074	6	East Palo Alto					20956
				088	5	Foster City					25338
				109	6	Hillsborough					33798
				154	5	Menlo Park					46870
				156	6	Millbrae					47486
				186	5	Pacifica					54806
				215	4	Redwood City					60102
				229	5	San Bruno					65028
				231	5	San Carlos					65070
				246	4	San Mateo					68252
				272	4	South San Francisco					73262
				999	9	Balance of county					99999
	042	253	1			Santa Barbara		083	2	7480	
				037	6	Carpinteria					11446
				139	5	Lompoc					42524
				251	4	Santa Barbara					69070
				256	4	Santa Maria					69196
				999	9	Balance of county					99999
	043	251	1			Santa Clara		085	0	7400	
				034	5	Campbell					10340
				060	5	Cupertino					17610
				095	5	Gilroy					29504
				142	5	Los Altos					43280
				145	5	Los Gatos					44112
				158	4	Milpitas					47766
				169	6	Morgan Hill					49278
				170	4	Mountain View					49670
				191	4	Palo Alto					55282
				240	1	San Jose					68000
				252	4	Santa Clara					69084
				261	5	Saratoga					70280
				276	3	Sunnyvale					77000
				999	9	Balance of county					99999
	044	254	1			Santa Cruz		087	3	7485	
				035	6	Capitola					11040
				254	5	Santa Cruz					69112
				297	5	Watsonville					83668
				999	9	Balance of county					99999
	045	229	1			Shasta		089	3	6690	
				212	4	Redding					59920
				999	9	Balance of county					99999
	046	000	2			Sierra		091	6	0000	
	047	000	2			Siskiyou		093	5	0000	
	048	290	1			Solano		095	2	8720	
				024	6	Benicia					05290
				070	6	Dixon					19402
				084	4	Fairfield					23182
				275	6	Suisun City					75630
				289	4	Vacaville					81554
				290	3	Vallejo					81666
				999	9	Balance of county					99999
	049	256	1			Sonoma		097	2	7500	
				197	5	Petaluma					56784
				222	5	Rohnert Park					62546
				259	3	Santa Rosa					70098
				999	9	Balance of county					99999
	050	185	1			Stanislaus		099	2	5170	
				040	5	Ceres					12524

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
05						California	06				
	050					Stanislaus, con.		099	2	5170	
				160	3	Modesto					48354
				178	6	Oakdale					52694
				283	5	Turlock					80812
				999	9	Balance of county					99999
	051	310	1			Sutter		101	4	9340	
				305	5	Yuba City					86972
				999	9	Balance of county					99999
	052	000	2			Tehama		103	5	0000	
				211	6	Red Bluff					59892
				999	9	Balance of county					99999
	053	000	2			Trinity		105	6	0000	
	054	294	1			Tulare		107	2	8780	
				069	6	Dinuba					19318
				206	5	Porterville					58240
				282	5	Tulare					80644
				292	4	Visalia					82954
				999	9	Balance of county					99999
	055	000	2			Tuolumne		109	5	0000	
	056	291	1			Ventura		111	1	8735	
				033	4	Camarillo					10046
				085	6	Fillmore					24092
				166	5	Moorpark					49138
				185	3	Oxnard					54652
				207	6	Port Hueneme					58296
				230	4	San Buenaventura (Ventura)					65042
				258	5	Santa Paula					70042
				266	3	Simi Valley					72016
				279	3	Thousand Oaks					78582
				999	9	Balance of county					99999
	057	307	1			Yolo		113	3	9270	
				065	5	Davis					18100
				301	5	West Sacramento					84816
				303	5	Woodland					86328
				999	9	Balance of county					99999
	058	310	1			Yuba		115	4	9340	
				152	6	Marysville					46170
				999	9	Balance of county					99999

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
06						Colorado	08				
	001	074	1			Adams		001	2	2080	
				001	4	Arvada, part					03455
				002	3	Aurora, part					04000
				004	6	Brighton, part					08675
				005	6	Broomfield, part					09280
				008	6	Commerce City					16495
				023	5	Northglenn					54330
				026	4	Thornton					77290
				027	4	Westminster, part					83835
				999	9	Balance of county					99999
	002	000	2			Alamosa		003	6	0000	
	003	074	1			Arapahoe		005	2	2080	
				002	3	Aurora, part					04000
				011	5	Englewood					24785
				019	5	Littleton, part					45255
				999	9	Balance of county					99999
	004	000	2			Archuleta		007	6	0000	
	005	000	2			Baca		009	6	0000	
	006	000	2			Bent		011	6	0000	
	007	038	1			Boulder		013	3	1125	
				003	4	Boulder					07850
				005	6	Broomfield, part					09280
				017	6	Lafayette					41835
				020	4	Longmont					45970
				021	6	Louisville					46355
				999	9	Balance of county					99999
	008	000	2			Chaffee		015	6	0000	
	009	000	2			Cheyenne		017	6	0000	
	010	000	2			Clear Creek		019	6	0000	
	011	000	2			Conejos		021	6	0000	
	012	000	2			Costilla		023	6	0000	
	013	000	2			Crowley		025	6	0000	
	014	000	2			Custer		027	6	0000	
	015	000	2			Delta		029	6	0000	
	016	074	1			Denver, coext. with Denver city		031	2	2080	20000
	017	000	2			Dolores		033	6	0000	
	018	074	1			Douglas		035	4	2080	
				002	3	Aurora, part					04000
				019	5	Littleton, part					45255
				999	9	Balance of county					99999
	019	000	2			Eagle		037	6	0000	
	020	000	2			Elbert		039	6	0000	
	021	060	1			El Paso		041	2	1720	
				007	2	Colorado Springs					16000
				013	6	Fountain					27865
				999	9	Balance of county					99999
	022	000	2			Fremont		043	5	0000	
				006	6	Canon City					11810
				999	9	Balance of county					99999
	023	000	2			Garfield		045	5	0000	
	024	000	2			Gilpin		047	6	0000	
	025	000	2			Grand		049	6	0000	
	026	000	2			Gunnison		051	6	0000	
	027	000	2			Hinsdale		053	6	0000	
	028	000	2			Huerfano		055	6	0000	
	029	000	2			Jackson		057	6	0000	
	030	074	1			Jefferson		059	2	2080	
				001	4	Arvada, part					03455
				005	6	Broomfield, part					09280
				014	6	Golden					30835
				018	3	Lakewood					43000
				027	4	Westminster, part					83835
				028	5	Wheat Ridge					84440
				999	9	Balance of county					99999
	031	000	2			Kiowa		061	6	0000	
	032	000	2			Kit Carson		063	6	0000	
	033	000	2			Lake		065	6	0000	
	034	000	2			La Plata		067	5	0000	
				010	6	Durango					22035
				999	9	Balance of county					99999
	035	096	1			Larimer		069	3	2670	
				012	4	Fort Collins					27425
				022	5	Loveland					46465
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
06						Colorado	08				
	036	000	2	999	9	Las Animas		071	6	0000	
	037	000	2	999	9	Lincoln		073	6	0000	
	038	000	2			Logan		075	6	0000	
				025	6	Sterling					73935
				999	9	Balance of county					99999
	039	000	2			Mesa		077	4	0000	
				015	5	Grand Junction					31660
				999	9	Balance of county					99999
	040	000	2	999	9	Mineral		079	6	0000	
	041	000	2	999	9	Moffat		081	6	0000	
	042	000	2	999	9	Montezuma		083	6	0000	
	043	000	2	999	9	Montrose		085	6	0000	
	044	000	2	999	9	Morgan		087	6	0000	
	045	000	2	999	9	Otero		089	6	0000	
	046	000	2	999	9	Ouray		091	6	0000	
	047	000	2	999	9	Park		093	6	0000	
	048	000	2	999	9	Phillips		095	6	0000	
	049	000	2	999	9	Pitkin		097	6	0000	
	050	000	2	999	9	Prowers		099	6	0000	
	051	223	1			Pueblo		101	3	6560	
				024	4	Pueblo					62000
				999	9	Balance of county					99999
	052	000	2	999	9	Rio Blanco		103	6	0000	
	053	000	2	999	9	Rio Grande		105	6	0000	
	054	000	2	999	9	Routt		107	6	0000	
	055	000	2	999	9	Saguache		109	6	0000	
	056	000	2	999	9	San Juan		111	6	0000	
	057	000	2	999	9	San Miguel		113	6	0000	
	058	000	2	999	9	Sedgwick		115	6	0000	
	059	000	2	999	9	Summit		117	6	0000	
	060	000	2	999	9	Teller		119	6	0000	
	061	000	2	999	9	Washington		121	6	0000	
	062	114	1			Weld		123	3	3060	
				004	6	Brighton, part					08675
				005	6	Broomfield, part					09280
				016	4	Greeley					32155
				999	9	Balance of county					99999
	063	000	2	999	9	Yuma		125	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
07						Connecticut	09				
	001	194	1			Fairfield		001	1	5483	
				002	6	Bethel town					04720
				004	3	Bridgeport					08000
				007	4	Danbury					18430
				008	6	Darien town					18920
				014	4	Fairfield town					26620
				016	4	Greenwich town					33620
				029	4	Norwalk					55990
				033	5	Shelton					68100
				035	3	Stamford					73000
				036	5	Stratford town					74260
				038	5	Trumbull town					77270
				044	6	Westport town					83500
				999	9	Balance of county					99999
	002	122	1			Hartford		003	1	3283	
				005	4	Bristol					08420
				011	4	East Hartford town					22630
				013	5	Enfield town					25990
				015	5	Glastonbury town					31240
				018	3	Hartford					37000
				019	4	Manchester town					44700
				024	4	New Britain					50370
				026	5	Newington town					52210
				031	6	Plainville town					60120
				032	6	Rocky Hill town					65370
				034	5	Southington town					70550
				042	4	West Hartford town					82590
				045	5	Wethersfield town					84900
				046	6	Windsor Locks town					87070
				047	5	Windsor town					87000
				999	9	Balance of county					99999
	003	000	2			Litchfield		005	3	0000	
				037	5	Torrington					76500
				999	9	Balance of county					99999
	004	122	1			Middlesex		007	3	3283	
				021	5	Middletown					47290
				999	9	Balance of county					99999
	005	194	1			New Haven		009	1	5483	
				001	6	Ansonia					01150
				003	5	Branford town					07310
				006	5	Cheshire town					14160
				009	6	Derby					19480
				009	6	Derby					19480
				012	5	East Haven town					22980
				017	4	Hamden town					35650
				020	4	Meriden					46450
				022	5	Milford					47500
				023	5	Naugatuck borough					49880
				025	3	New Haven					52000
				028	6	North Haven town					54870
				040	5	Wallingford town					78740
				041	3	Waterbury					80000
				043	4	West Haven					82800
				999	9	Balance of county					99999
	006	195	1			New London		011	2	5523	
				027	5	New London					52280
				030	5	Norwich					56200
				999	9	Balance of county					99999
	007	122	1			Tolland		013	3	3283	
				039	5	Vernon town					78250
				999	9	Balance of county					99999
	008	000	2			Windham		015	3	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
08						Delaware	10				
	001	078	1			Kent		001	3	2190	
				001	5	Dover					21200
				999	9	Balance of county					99999
	002	304	1			New Castle		003	2	9160	
				002	5	Newark					50670
				003	4	Wilmington					77580
				999	9	Balance of county					99999
	003	000	2	999	9	Sussex		005	3	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
09	001	296	1	001	1	District of Columbia	11	001	1	8840	

Vital Statistics Codes						FIPS Codes				
St Cnty	P/MSA	M/NM	City	P/S	Area Names	St Cnty	P/S	P/MSA	Place	
10					Florida	12				
001	106	1			Alachua	001	3	2900		
			032	4	Gainesville				25175	
			999	9	Balance of county				99999	
002	000	2	999	9	Baker	003	6	0000		
003	210	1			Bay	005	3	6015		
			009	6	Callaway				09725	
			080	5	Panama City				54700	
			999	9	Balance of county				99999	
004	000	2	999	9	Bradford	007	6	0000		
005	177	1			Brevard	009	2	4900		
			013	6	Cocoa				13150	
			014	6	Cocoa Beach				13175	
			055	4	Melbourne				43975	
			078	4	Palm Bay				54000	
			091	6	Rockledge				61500	
			110	5	Titusville				71900	
			999	9	Balance of county				99999	
006	097	1			Broward	011	0	2680		
			015	5	Coconut Creek				13275	
			016	6	Cooper City				14125	
			018	4	Coral Springs				14400	
			019	6	Dania				16325	
			020	5	Davie				16475	
			022	5	Deerfield Beach				16725	
			028	3	Fort Lauderdale				24000	
			036	5	Hallandale				28450	
			039	3	Hollywood				32000	
			049	5	Lauderdale Lakes				39525	
			050	5	Lauderhill				39550	
			052	6	Lighthouse Point				40450	
			054	5	Margate				43125	
			060	5	Miramar				45975	
			065	5	North Lauderdale				49425	
			070	5	Oakland Park				50575	
			081	4	Pembroke Pines				55775	
			084	4	Plantation				57425	
			086	4	Pompano Beach				58050	
			103	4	Sunrise				69700	
			106	5	Tamarac				70675	
			114	6	Wilton Manors				78000	
			999	9	Balance of county				99999	
007	000	2	999	9	Calhoun	013	6	0000		
008	224	1			Charlotte	015	3	6580		
			089	6	Punta Gorda				59200	
			999	9	Balance of county				99999	
009	000	2	999	9	Citrus	017	4	0000		
010	135	1	999	9	Clay	019	3	3600		
011	191	1			Collier	021	3	5345		
			061	6	Naples				47625	
			999	9	Balance of county				99999	
012	000	2	999	9	Columbia	023	5	0000		
013	180	1			Dade	025	0	5000		
			017	5	Coral Gables				14250	
			037	3	Hialeah				30000	
			040	5	Homestead				32275	
			056	2	Miami				45000	
			057	4	Miami Beach				45025	
			058	6	Miami Shores				45175	
			059	6	Miami Springs				45200	
			066	5	North Miami				49450	
			067	5	North Miami Beach				49475	
			073	6	Opa-locka				51650	
			101	6	South Miami				67550	
			104	6	Sweetwater				70275	
			999	9	Balance of county				99999	
014	000	2	999	9	De Soto	027	6	0000		
015	000	2	999	9	Dixie	029	6	0000		
016	135	1			Duval	031	1	3600		
			003	6	Atlantic Beach				02400	
			041	1	Jacksonville				35000	
			042	6	Jacksonville Beach				35050	
			999	9	Balance of county				99999	
017	212	1			Escambia	033	2	6080		
			082	4	Pensacola				55925	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
10						Florida	12				
	017			999	9	Escambia, con.	033	2		6080	
						Balance of county					99999
	018	071	1	999	9	Flagler	035	5		2020	
	019	000	2	999	9	Franklin	037	6		0000	
	020	278	1	999	9	Gadsden	039	5		8240	
	021	000	2	999	9	Gilchrist	041	6		0000	
	022	000	2	999	9	Glades	043	6		0000	
	023	000	2	999	9	Gulf	045	6		0000	
	024	000	2	999	9	Hamilton	047	6		0000	
	025	000	2	999	9	Hardee	049	6		0000	
	026	000	2	999	9	Hendry	051	5		0000	
	027	279	1	999	9	Hernando	053	3		8280	
	028	000	2	999	9	Highlands	055	4		0000	
	029	279	1			Hillsborough	057	1		8280	
				085	6	Plant City					57550
				107	2	Tampa					71000
				109	6	Temple Terrace					71400
				999	9	Balance of county					99999
	030	000	2	999	9	Holmes	059	6		0000	
	031	000	2			Indian River	061	4		0000	
				099	6	Sebastian					64825
				112	6	Vero Beach					74150
				999	9	Balance of county					99999
	032	000	2	999	9	Jackson	063	5		0000	
	033	000	2	999	9	Jefferson	065	6		0000	
	034	000	2	999	9	Lafayette	067	6		0000	
	035	208	1			Lake	069	3		5960	
				027	6	Eustis					21350
				051	6	Leesburg					39875
				999	9	Balance of county					99999
	036	098	1			Lee	071	2		2700	
				010	4	Cape Coral					10275
				029	5	Fort Myers					24125
				999	9	Balance of county					99999
	037	278	1			Leon	073	3		8240	
				105	3	Tallahassee					70600
				999	9	Balance of county					99999
	038	000	2	999	9	Levy	075	5		0000	
	039	000	2	999	9	Liberty	077	6		0000	
	040	000	2	999	9	Madison	079	6		0000	
	041	257	1			Manatee	081	3		7510	
				008	5	Bradenton					07950
				999	9	Balance of county					99999
	042	202	1			Marion	083	3		5790	
				071	5	Ocala					50750
				999	9	Balance of county					99999
	043	099	1			Martin	085	3		2710	
				102	6	Stuart					68875
				999	9	Balance of county					99999
	044	000	2			Monroe	087	4		0000	
				044	6	Key West					36550
				999	9	Balance of county					99999
	045	135	1	999	9	Nassau	089	5		3600	
	046	101	1			Okaloosa	091	3		2750	
				031	6	Fort Walton Beach					24475
				064	6	Niceville					48750
				999	9	Balance of county					99999
	047	000	2	999	9	Okeechobee	093	5		0000	
	048	208	1			Orange	095	1		5960	
				002	6	Apopka					01700
				072	6	Ocoee					51075
				074	3	Orlando					53000
				116	6	Winter Park					78300
				999	9	Balance of county					99999
	049	208	1			Osceola	097	3		5960	
				045	5	Kissimmee					36950
				095	6	St. Cloud					62625
				999	9	Balance of county					99999
	050	299	1			Palm Beach	099	1		8960	
				005	6	Belle Glade					05200
				006	4	Boca Raton					07300
				007	5	Boynton Beach					07875
				024	5	Delray Beach					17100
				033	6	Greenacres City					27325

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
10						Florida	12				
	050					Palm Beach, con.	099	1		8960	
				043	6	Jupiter					35875
				047	5	Lake Worth					39075
				068	6	North Palm Beach					49600
				079	6	Palm Beach Gardens					54075
				090	5	Riviera Beach					60975
				092	6	Royal Palm Beach					62100
				113	4	West Palm Beach					76600
				999	9	Balance of county					99999
	051	279	1			Pasco	101	2		8280	
				062	6	New Port Richey					48500
				999	9	Balance of county					99999
	052	279	1			Pinellas	103	1		8280	
				012	4	Clearwater					12875
				025	5	Dunedin					18575
				034	6	Gulfport					28175
				048	4	Largo					39425
				083	5	Pinellas Park					56975
				093	6	Safety Harbor					62425
				096	3	St. Petersburg					63000
				108	6	Tarpon Springs					71150
				999	9	Balance of county					99999
	053	154	1			Polk	105	2		3980	
				004	6	Bartow					03675
				035	6	Haines City					28400
				046	4	Lakeland					38250
				115	6	Winter Haven					78275
				999	9	Balance of county					99999
	054	000	2			Putnam	107	4		0000	
				077	6	Palatka					53875
				999	9	Balance of county					99999
	055	135	1			St. Johns	109	4		3600	
				094	6	St. Augustine					62500
				999	9	Balance of county					99999
	056	099	1			St. Lucie	111	3		2710	
				030	5	Fort Pierce					24300
				088	4	Port St. Lucie					58725
				999	9	Balance of county					99999
	057	212	1			Santa Rosa	113	4		6080	
	058	257	1			Sarasota	115	2		7510	
				069	6	North Port					49675
				098	4	Sarasota					64175
				111	6	Venice					73900
				999	9	Balance of county					99999
	059	208	1			Seminole	117	2		5960	
				001	5	Altamonte Springs					00950
				011	6	Casselberry					11050
				053	6	Longwood					41250
				076	6	Oviedo					53575
				097	5	Sanford					63650
				117	6	Winter Springs					78325
				999	9	Balance of county					99999
	060	000	2			Sumter	119	5		0000	
	061	000	2			Suwannee	121	5		0000	
	062	000	2			Taylor	123	6		0000	
	063	000	2			Union	125	6		0000	
	064	071	1			Volusia	127	2		2020	
				021	4	Daytona Beach					16525
				023	6	DeLand					16875
				026	6	Edgewater					19825
				038	6	Holly Hill					31350
				063	6	New Smyrna Beach					48625
				075	5	Ormond Beach					53150
				087	5	Port Orange					58575
				100	6	South Daytona					67325
				999	9	Balance of county					99999
	065	000	2			Wakulla	129	6		0000	
	066	000	2			Walton	131	5		0000	
	067	000	2			Washington	133	6		0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
11						Georgia	13				
	139	000	2	999	9	Towns		281	6	0000	
	140	000	2	999	9	Treutlen		283	6	0000	
	141	000	2			Troup		285	4	0000	
				025	5	La Grange					44340
				999	9	Balance of county					99999
	142	000	2	999	9	Turner		287	6	0000	
	143	172	1	999	9	Twiggs		289	6	4680	
	144	000	2	999	9	Union		291	6	0000	
	145	000	2	999	9	Upson		293	5	0000	
	146	053	1	999	9	Walker		295	4	1560	
	147	016	1	999	9	Walton		297	5	0520	
	148	000	2			Ware		299	5	0000	
				044	6	Waycross, part					80956
				999	9	Balance of county					99999
	149	000	2	999	9	Warren		301	6	0000	
	150	000	2	999	9	Washington		303	6	0000	
	151	000	2	999	9	Wayne		305	6	0000	
	152	000	2	999	9	Webster		307	6	0000	
	153	000	2	999	9	Wheeler		309	6	0000	
	154	000	2	999	9	White		311	6	0000	
	155	000	2			Whitfield		313	4	0000	
				015	6	Dalton					21380
				999	9	Balance of county					99999
	156	000	2	999	9	Wilcox		315	6	0000	
	157	000	2	999	9	Wilkes		317	6	0000	
	158	000	2	999	9	Wilkinson		319	6	0000	
	159	000	2	999	9	Worth		321	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
12						Hawaii	15				
	001	000	2			Hawaii		001	3	0000	
				002	5	Hilo					14650
				999	9	Balance of county					99999
	002	125	1			Honolulu		003	1	3320	
				001	6	Ewa Beach					07450
				003	2	Honolulu					17000
				005	5	Kailua					23150
				006	5	Kaneohe					28250
				007	5	Mililani Town					51050
				008	5	Pearl City					62600
				009	6	Schofield Barracks					69050
				010	6	Wahiawa					72650
				012	5	Waipahu					79700
				999	9	Balance of county					99999
	003	000	2	999	9	Kalawao		005	6	0000	
	004	000	2	999	9	Kauai		007	4	0000	
	005	000	2			Maui		009	3	0000	
				004	6	Kahului					22700
				011	6	Wailuku					77450
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
13						Idaho	16				
	001	036	1			Ada	001	3		1080	
				001	3	Boise City					08830
				999	9	Balance of county					99999
	002	000	2	999	9	Adams	003	6		0000	
	003	000	2			Bannock	005	4		0000	
				008	5	Pocatello, part					64090
				999	9	Balance of county					99999
	004	000	2	999	9	Bear Lake	007	6		0000	
	005	000	2	999	9	Benewah	009	6		0000	
	006	000	2	999	9	Bingham	011	5		0000	
	007	000	2	999	9	Blaine	013	6		0000	
	008	000	2	999	9	Boise	015	6		0000	
	009	000	2	999	9	Bonner	017	5		0000	
	010	000	2			Bonneville	019	4		0000	
				004	5	Idaho Falls					39700
				999	9	Balance of county					99999
	011	000	2	999	9	Boundary	021	6		0000	
	012	000	2	999	9	Butte	023	6		0000	
	013	000	2	999	9	Camas	025	6		0000	
	014	036	1			Canyon	027	4		1080	
				002	6	Caldwell					12250
				007	5	Nampa					56260
				999	9	Balance of county					99999
	015	000	2	999	9	Caribou	029	6		0000	
	016	000	2	999	9	Cassia	031	6		0000	
	017	000	2	999	9	Clark	033	6		0000	
	018	000	2	999	9	Clearwater	035	6		0000	
	019	000	2	999	9	Custer	037	6		0000	
	020	000	2	999	9	Elmore	039	6		0000	
	021	000	2	999	9	Franklin	041	6		0000	
	022	000	2	999	9	Fremont	043	6		0000	
	023	000	2	999	9	Gem	045	6		0000	
	024	000	2	999	9	Gooding	047	6		0000	
	025	000	2	999	9	Idaho	049	6		0000	
	026	000	2	999	9	Jefferson	051	6		0000	
	027	000	2	999	9	Jerome	053	6		0000	
	028	000	2			Kootenai	055	4		0000	
				003	6	Coeur d'Alene					16750
				999	9	Balance of county					99999
	029	000	2			Latah	057	5		0000	
				006	6	Moscow					54550
				999	9	Balance of county					99999
	030	000	2	999	9	Lemhi	059	6		0000	
	031	000	2	999	9	Lewis	061	6		0000	
	032	000	2	999	9	Lincoln	063	6		0000	
	033	000	2			Madison	065	6		0000	
				009	6	Rexburg					67420
				999	9	Balance of county					99999
	034	000	2	999	9	Minidoka	067	6		0000	
	035	000	2			Nez Perce	069	5		0000	
				005	5	Lewiston					46540
				999	9	Balance of county					99999
	036	000	2	999	9	Oneida	071	6		0000	
	037	000	2	999	9	Owyhee	073	6		0000	
	038	000	2	999	9	Payette	075	6		0000	
	039	000	2			Power	077	6		0000	
				008	5	Pocatello, part					64090
				999	9	Balance of county					99999
	040	000	2	999	9	Shoshone	079	6		0000	
	041	000	2	999	9	Teton	081	6		0000	
	042	000	2			Twin Falls	083	4		0000	
				010	5	Twin Falls					82810
				999	9	Balance of county					99999
	043	000	2	999	9	Valley	085	6		0000	
	044	000	2	999	9	Washington	087	6		0000	

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
14						Illinois	17				
	001	000	2			Adams	001	4		0000	
				138	5	Quincy					62367
				999	9	Balance of county					99999
	002	000	2	999	9	Alexander	003	6		0000	
	003	000	2	999	9	Bond	005	6		0000	
	004	237	1			Boone	007	5		6880	
				011	6	Belvidere					05092
				999	9	Balance of county					99999
	005	000	2	999	9	Brown	009	6		0000	
	006	000	2	999	9	Bureau	011	5		0000	
	007	000	2	999	9	Calhoun	013	6		0000	
	008	000	2	999	9	Carroll	015	6		0000	
	009	000	2	999	9	Cass	017	6		0000	
	010	048	1			Champaign	019	3		1400	
				032	4	Champaign					12385
				139	6	Rantoul village					62783
				160	5	Urbana					77005
				999	9	Balance of county					99999
	011	000	2			Christian	021	5		0000	
				158	6	Taylorville					74574
				999	9	Balance of county					99999
	012	000	2	999	9	Clark	023	6		0000	
	013	000	2	999	9	Clay	025	6		0000	
	014	243	1			Clinton	027	5		7040	
				031	6	Centralia, part					12164
				999	9	Balance of county					99999
	015	000	2			Coles	029	4		0000	
				033	6	Charleston					12567
				105	6	Mattoon					47553
				999	9	Balance of county					99999
	016	055	1			Cook	031	0		1600	
				003	6	Alsip village					01010
				005	4	Arlington Heights village					02154
				007	6	Bartlett village, part					04013
				010	6	Bellwood village					04975
				012	6	Bensenville village, part					05248
				013	5	Berwyn					05573
				016	6	Blue Island					06704
				020	6	Bridgeview village					08225
				021	6	Brookfield village					08576
				022	5	Buffalo Grove village, part					09447
				023	5	Burbank					09642
				025	5	Calumet City					10487
				034	0	Chicago, part					14000
				035	5	Chicago Heights					14026
				036	6	Chicago Ridge village					14065
				037	4	Cicero					14351
				039	6	Country Club Hills					16691
				041	6	Crestwood village					17497
				046	6	Deerfield village, part					18992
				048	4	Des Plaines					19642
				050	6	Dolton village					20292
				057	4	Elgin, part					23074
				058	5	Elk Grove Village village, part					23256
				060	6	Elmwood Park village					23724
				061	4	Evanston					24582
				062	6	Evergreen Park village					24634
				064	6	Forest Park village					26935
				065	6	Franklin Park village					27702
				071	5	Glenview village					29938
				074	5	Hanover Park village, part					32746
				075	5	Harvey					33383
				076	6	Hazel Crest village					33695
				078	6	Hickory Hills					34514
				080	6	Hinsdale village, part					35307
				081	5	Hoffman Estates village, part					35411
				082	6	Homewood village					35879
				085	6	Justice village					38830
				088	6	La Grange Park village					40793
				089	6	La Grange village					40767
				092	5	Lansing village					42028
				095	6	Lincolnwood village					43744
				103	6	Markham					47007
				104	6	Matteson village					47540

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
14						Illinois	17				
	016					Cook, con.		031	0	1600	
				106	5	Maywood village					47774
				107	6	Melrose Park village					48242
				108	6	Midlothian village					48892
				111	6	Morton Grove village					50647
				113	4	Mount Prospect village					51089
				117	5	Niles village					53000
				119	6	Norridge village					53377
				120	5	Northbrook village					53481
				122	6	Northlake					53871
				123	5	Oak Forest					54638
				124	4	Oak Lawn village					54820
				125	4	Oak Park village					54885
				127	5	Orland Park village					56640
				129	5	Palatine village					57225
				130	6	Palos Heights					57381
				131	6	Palos Hills					57394
				132	6	Park Forest village, part					57732
				133	5	Park Ridge					57875
				137	6	Prospect Heights					62016
				140	6	Richton Park village					63706
				141	6	Riverdale village					64278
				142	6	River Forest village					64304
				145	6	Rolling Meadows					65338
				147	6	Roselle village, part					65806
				150	4	Schaumburg village, part					68003
				151	6	Schiller Park village					68081
				152	4	Skokie village					70122
				153	6	South Holland village					70850
				156	5	Streamwood village					73157
				159	5	Tinley Park village, part					75484
				166	6	Westchester village					80047
				168	6	Western Springs village					80242
				171	5	Wheeling village, part					81087
				172	5	Wilmette village					82075
				173	6	Winnetka village					82530
				178	6	Worth village					83518
				999	9	Balance of county					99999
	017	000	2	999	9	Crawford		033	6	0000	
	018	000	2	999	9	Cumberland		035	6	0000	
	019	055	1			De Kalb		037	4	1600	
				047	5	De Kalb					19161
				999	9	Balance of county					99999
	020	000	2	999	9	De Witt		039	6	0000	
	021	000	2	999	9	Douglas		041	6	0000	
	022	055	1			Du Page		043	1	1600	
				001	5	Addison village					00243
				006	4	Aurora, part					03012
				007	6	Bartlett village, part					04013
				008	6	Batavia, part					04078
				012	6	Bensenville village, part					05248
				014	6	Bloomington village					06587
				017	5	Bolingbrook village, part					07133
				028	5	Carol Stream village					11332
				034	0	Chicago, part					14000
				044	6	Darien					18628
				051	5	Downers Grove village					20591
				058	5	Elk Grove Village village, part					23256
				059	5	Elmhurst					23620
				069	5	Glendale Heights village					29730
				070	6	Glen Ellyn village					29756
				074	5	Hanover Park village, part					32746
				080	6	Hinsdale village, part					35307
				096	6	Lisle village					43939
				097	5	Lombard village					44407
				116	4	Naperville, part					51622
				147	6	Roselle village, part					65806
				149	6	St. Charles, part					66703
				150	4	Schaumburg village, part					68003
				162	6	Villa Park village					77993
				163	6	Warrenville					78929
				167	6	West Chicago					80060
				169	6	Westmont village					80645
				170	4	Wheaton					81048

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
14						Illinois	17				
	022					Du Page, con.	043	1		1600	
				174	6	Wood Dale					82985
				175	5	Woodridge village, part					83245
				999	9	Balance of county					99999
	023	000	2			Edgar	045	6		0000	
	024	000	2			Edwards	047	6		0000	
	025	000	2			Effingham	049	5		0000	
				056	6	Effingham					22736
				999	9	Balance of county					99999
	026	000	2			Fayette	051	6		0000	
	027	000	2			Ford	053	6		0000	
	028	000	2			Franklin	055	5		0000	
	029	000	2			Fulton	057	5		0000	
				026	6	Canton					11007
				999	9	Balance of county					99999
	030	000	2			Gallatin	059	6		0000	
	031	000	2			Greene	061	6		0000	
	032	055	1			Grundy	063	5		1600	
				110	6	Morris					50491
				999	9	Balance of county					99999
	033	000	2			Hamilton	065	6		0000	
	034	000	2			Hancock	067	6		0000	
	035	000	2			Hardin	069	6		0000	
	036	000	2			Henderson	071	6		0000	
	037	069	1			Henry	073	4		1960	
				087	6	Kewanee					39727
				999	9	Balance of county					99999
	038	000	2			Iroquois	075	5		0000	
	039	000	2			Jackson	077	4		0000	
				027	5	Carbondale					11163
				999	9	Balance of county					99999
	040	000	2			Jasper	079	6		0000	
	041	000	2			Jefferson	081	5		0000	
				114	6	Mount Vernon					51180
				999	9	Balance of county					99999
	042	243	1			Jersey	083	6		7040	
	043	000	2			Jo Daviess	085	6		0000	
	044	000	2			Johnson	087	6		0000	
	045	055	1			Kane	089	2		1600	
				002	6	Algonquin village, part					00685
				006	4	Aurora, part					03012
				007	6	Bartlett village, part					04013
				008	6	Batavia, part					04078
				029	6	Carpentersville village					11358
				057	4	Elgin, part					23074
				068	6	Geneva					28872
				149	6	St. Charles, part					66703
				999	9	Balance of county					99999
	046	144	1			Kankakee	091	4		3740	
				018	6	Bourbonnais village					07471
				019	6	Bradley village					07744
				086	5	Kankakee					38934
				999	9	Balance of county					99999
	047	055	1			Kendall	093	5		1600	
	048	000	2			Knox	095	4		0000	
				067	5	Galesburg					28326
				999	9	Balance of county					99999
	049	055	1			Lake	097	1		1600	
				022	5	Buffalo Grove village, part					09447
				046	6	Deerfield village, part					18992
				073	6	Gurnee village					32018
				079	5	Highland Park					34722
				090	6	Lake Forest					41105
				091	6	Lake Zurich village					41742
				093	6	Libertyville village					43250
				115	6	Mundelein village					51349
				121	5	North Chicago					53559
				148	6	Round Lake Beach village					66040
				161	6	Vernon Hills village					77694
				165	4	Waukegan					79293
				171	5	Wheeling village, part					81087
				179	6	Zion					84220
				999	9	Balance of county					99999
	050	000	2			La Salle	099	3		0000	
				128	6	Ottawa					56926

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
14						Illinois	17				
	050			157	6	La Salle, con.	099	3	0000		73170
				999	9	Streator, part					99999
				999	9	Balance of county					
	051	000	2	999	9	Lawrence	101	6	0000		
	052	000	2			Lee	103	5	0000		
				049	6	Dixon					20162
				999	9	Balance of county					99999
	053	000	2			Livingston	105	5	0000		
				136	6	Pontiac					61015
				157	6	Streator, part					73170
				999	9	Balance of county					99999
	054	000	2			Logan	107	5	0000		
				094	6	Lincoln					43536
				999	9	Balance of county					99999
	055	000	2			McDonough	109	5	0000		
				101	6	Macomb					45889
				999	9	Balance of county					99999
	056	055	1			McHenry	111	3	1600		
				002	6	Algonquin village, part					00685
				030	6	Cary village					11592
				042	6	Crystal Lake					17887
				099	6	McHenry					45694
				177	6	Woodstock					83349
				999	9	Balance of county					99999
	057	035	1			McLean	113	3	1040		
				015	4	Bloomington					06613
				118	5	Normal					53234
				999	9	Balance of county					99999
	058	073	1			Macon	115	3	2040		
				045	4	Decatur					18823
				999	9	Balance of county					99999
	059	000	2	999	9	Macoupin	117	5	0000		
	060	243	1			Madison	119	3	7040		
				004	5	Alton					01114
				038	6	Collinsville, part					15599
				055	6	Edwardsville					22697
				072	5	Granite City					30926
				176	6	Wood River					83271
				999	9	Balance of county					99999
	061	000	2			Marion	121	5	0000		
				031	6	Centralia, part					12164
				999	9	Balance of county					99999
	062	000	2	999	9	Marshall	123	6	0000		
	063	000	2	999	9	Mason	125	6	0000		
	064	000	2	999	9	Massac	127	6	0000		
	065	269	1	999	9	Menard	129	6	7880		
	066	000	2	999	9	Mercer	131	6	0000		
	067	243	1	999	9	Monroe	133	6	7040		
	068	000	2	999	9	Montgomery	135	5	0000		
	069	000	2			Morgan	137	5	0000		
				083	6	Jacksonville					38115
				999	9	Balance of county					99999
	070	000	2	999	9	Moultrie	139	6	0000		
	071	237	1	999	9	Ogle	141	5	6880		
	072	213	1			Peoria	143	3	6120		
				134	5	Pekin, part					58447
				135	3	Peoria					59000
				999	9	Balance of county					99999
	073	000	2	999	9	Perry	145	6	0000		
	074	000	2	999	9	Piatt	147	6	0000		
	075	000	2	999	9	Pike	149	6	0000		
	076	000	2	999	9	Pope	151	6	0000		
	077	000	2	999	9	Pulaski	153	6	0000		
	078	000	2	999	9	Putnam	155	6	0000		
	079	000	2	999	9	Randolph	157	5	0000		
	080	000	2	999	9	Richland	159	6	0000		
	081	069	1			Rock Island	161	3	1960		
				052	6	East Moline					22073
				109	5	Moline					49867
				144	5	Rock Island					65078
				999	9	Balance of county					99999
	082	243	1			St. Clair	163	2	7040		
				009	5	Belleville					04845
				024	6	Cahokia village					10370

Vital Statistics Codes				FIPS Codes				Place		
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St		Cnty	P/S
14						Illinois	17			
	082					St. Clair, con.		163	2	7040
				038	6	Collinsville, part				15599
				054	5	East St. Louis				22255
				063	6	Fairview Heights				25141
				126	6	O'Fallon				55249
				999	9	Balance of county				99999
	083	000	2	999	9	Saline		165	5	0000
	084	269	1			Sangamon		167	3	7880
				154	3	Springfield				72000
				999	9	Balance of county				99999
	085	000	2	999	9	Schuyler		169	6	0000
	086	000	2	999	9	Scott		171	6	0000
	087	000	2	999	9	Shelby		173	6	0000
	088	000	2	999	9	Stark		175	6	0000
	089	000	2			Stephenson		177	5	0000
				066	5	Freeport				27884
				999	9	Balance of county				99999
	090	213	1			Tazewell		179	3	6120
				053	6	East Peoria				22164
				112	6	Morton village				50621
				134	5	Pekin, part				58447
				164	6	Washington				79033
				999	9	Balance of county				99999
	091	000	2	999	9	Union		181	6	0000
	092	000	2			Vermilion		183	4	0000
				043	5	Danville				18563
				999	9	Balance of county				99999
	093	000	2	999	9	Wabash		185	6	0000
	094	000	2	999	9	Warren		187	6	0000
	095	000	2	999	9	Washington		189	6	0000
	096	000	2	999	9	Wayne		191	6	0000
	097	000	2	999	9	White		193	6	0000
	098	000	2			Whiteside		195	4	0000
				155	6	Sterling				72546
				999	9	Balance of county				99999
	099	055	1			Will		197	2	1600
				017	5	Bolingbrook village, part				07133
				040	6	Crest Hill				17458
				084	4	Joliet				38570
				116	4	Naperville, part				51622
				132	6	Park Forest village, part				57732
				146	6	Romeoville village				65442
				159	5	Tinley Park village, part				75484
				175	5	Woodridge village, part				83245
				999	9	Balance of county				99999
	100	000	2			Williamson		199	4	0000
				077	6	Herrin				34358
				102	6	Marion				46916
				999	9	Balance of county				99999
	101	237	1			Winnebago		201	2	6880
				098	6	Loves Park				45031
				100	6	Machesney Park village				45726
				143	3	Rockford				65000
				999	9	Balance of county				99999
	102	213	1	999	9	Woodford		203	5	6120

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
15						Indiana	18				
	001	102	1	999	9	Adams		001	5	2760	
	002	102	1			Allen		003	2	2760	
				015	3	Fort Wayne					25000
				047	6	New Haven					52992
				999	9	Balance of county					99999
	003	000	2			Bartholomew		005	4	0000	
				007	5	Columbus					14734
				999	9	Balance of county					99999
	004	000	2	999	9	Benton		007	6	0000	
	005	000	2	999	9	Blackford		009	6	0000	
	006	130	1			Boone		011	5	3480	
				035	6	Lebanon					42624
				999	9	Balance of county					99999
	007	000	2	999	9	Brown		013	6	0000	
	008	000	2	999	9	Carroll		015	6	0000	
	009	000	2			Cass		017	5	0000	
				036	6	Logansport					44658
				999	9	Balance of county					99999
	010	169	1			Clark		019	4	4520	
				006	6	Clarksville					12934
				029	6	Jeffersonville					38358
				999	9	Balance of county					99999
	011	280	1	999	9	Clay		021	6	8320	
	012	152	1			Clinton		023	5	3920	
				016	6	Frankfort					25324
				999	9	Balance of county					99999
	013	000	2	999	9	Crawford		025	6	0000	
	014	000	2			Daviess		027	5	0000	
				063	6	Washington					80504
				999	9	Balance of county					99999
	015	057	1	999	9	Dearborn		029	5	1640	
	016	000	2	999	9	Decatur		031	6	0000	
	017	102	1	999	9	De Kalb		033	5	2760	
	018	189	1			Delaware		035	3	5280	
				043	4	Muncie					51876
				999	9	Balance of county					99999
	019	000	2			Dubois		037	5	0000	
				028	6	Jasper					37782
				999	9	Balance of county					99999
	020	084	1			Elkhart		039	3	2330	
				013	5	Elkhart					20728
				019	6	Goshen					28386
				999	9	Balance of county					99999
	021	000	2			Fayette		041	5	0000	
				008	6	Connersville					14932
				999	9	Balance of county					99999
	022	169	1			Floyd		043	4	4520	
				045	5	New Albany					52326
				999	9	Balance of county					99999
	023	000	2	999	9	Fountain		045	6	0000	
	024	000	2	999	9	Franklin		047	6	0000	
	025	000	2	999	9	Fulton		049	6	0000	
	026	000	2	999	9	Gibson		051	5	0000	
	027	000	2			Grant		053	4	0000	
				038	5	Marion					46908
				999	9	Balance of county					99999
	028	000	2	999	9	Greene		055	5	0000	
	029	130	1			Hamilton		057	3	3480	
				005	5	Carmel					10342
				048	6	Noblesville					54180
				999	9	Balance of county					99999
	030	130	1			Hancock		059	5	3480	
				020	6	Greenfield					29520
				999	9	Balance of county					99999
	031	169	1	999	9	Harrison		061	5	4520	
	032	130	1			Hendricks		063	4	3480	
				050	6	Plainfield					60246
				999	9	Balance of county					99999
	033	000	2			Henry		065	5	0000	
				046	6	New Castle					52740
				999	9	Balance of county					99999
	034	149	1			Howard		067	4	3850	
				030	5	Kokomo					40392
				999	9	Balance of county					99999

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
15						Indiana	18				
	035	102	1			Huntington		069	5	2760	
				026	6	Huntington					35302
				999	9	Balance of county					99999
	036	000	2			Jackson		071	5	0000	
				054	6	Seymour					68832
				999	9	Balance of county					99999
	037	000	2			Jasper		073	6	0000	
	038	000	2			Jay		075	6	0000	
	039	000	2			Jefferson		077	5	0000	
				037	6	Madison					45990
				999	9	Balance of county					99999
	040	000	2			Jennings		079	6	0000	
	041	130	1			Johnson		081	4	3480	
				017	6	Franklin					25450
				021	5	Greenwood					29898
				999	9	Balance of county					99999
	042	000	2			Knox		083	5	0000	
				060	6	Vincennes					79208
				999	9	Balance of county					99999
	043	000	2			Kosciusko		085	4	0000	
				062	6	Warsaw					80306
				999	9	Balance of county					99999
	044	000	2			Lagrange		087	5	0000	
	045	108	1			Lake		089	2	2960	
				010	6	Crown Point					16138
				011	6	Dyer					19270
				012	5	East Chicago					19486
				018	3	Gary					27000
				022	6	Griffith					30042
				023	4	Hammond					31000
				024	6	Highland					33466
				025	6	Hobart					34114
				032	6	Lake Station					41535
				040	5	Merrillville					48528
				044	6	Munster					51912
				053	6	Schererville					68220
				999	9	Balance of county					99999
	046	000	2			La Porte		091	3	0000	
				033	6	La Porte					42246
				041	5	Michigan City					48798
				999	9	Balance of county					99999
	047	000	2			Lawrence		093	5	0000	
				002	6	Bedford					04114
				999	9	Balance of county					99999
	048	130	1			Madison		095	3	3480	
				001	4	Anderson					01468
				999	9	Balance of county					99999
	049	130	1			Marion		097	1	3480	
				003	6	Beech Grove					04204
				027	1	Indianapolis					36000
				034	5	Lawrence					42426
				057	6	Speedway					71828
				999	9	Balance of county					99999
	050	000	2			Marshall		099	5	0000	
	051	000	2			Martin		101	6	0000	
	052	000	2			Miami		103	5	0000	
				049	6	Peru					59328
				999	9	Balance of county					99999
	053	034	1			Monroe		105	3	1020	
				004	4	Bloomington					05860
				999	9	Balance of county					99999
	054	000	2			Montgomery		107	5	0000	
				009	6	Crawfordsville					15742
				999	9	Balance of county					99999
	055	130	1			Morgan		109	4	3480	
				039	6	Martinsville					47448
				999	9	Balance of county					99999
	056	000	2			Newton		111	6	0000	
	057	000	2			Noble		113	5	0000	
	058	057	1			Ohio		115	6	1640	
	059	000	2			Orange		117	6	0000	
	060	000	2			Owen		119	6	0000	
	061	000	2			Parke		121	6	0000	
	062	000	2			Perry		123	6	0000	

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
15						Indiana	18				
	063	000	2	999	9	Pike		125	6	0000	
	064	108	1			Porter		127	3	2960	
				051	5	Portage					61092
				059	6	Valparaiso					78326
				999	9	Balance of county					99999
	065	089	1	999	9	Posey		129	5	2440	
	066	000	2	999	9	Pulaski		131	6	0000	
	067	000	2	999	9	Putnam		133	5	0000	
	068	000	2	999	9	Randolph		135	5	0000	
	069	000	2	999	9	Ripley		137	6	0000	
	070	000	2	999	9	Rush		139	6	0000	
	071	267	1			St. Joseph		141	3	7800	
				042	5	Mishawaka					49932
				056	3	South Bend					71000
				999	9	Balance of county					99999
	072	169	1	999	9	Scott		143	6	4520	
	073	130	1			Shelby		145	5	3480	
				055	6	Shelbyville					69318
				999	9	Balance of county					99999
	074	000	2	999	9	Spencer		147	6	0000	
	075	000	2	999	9	Starke		149	6	0000	
	076	000	2	999	9	Steuben		151	5	0000	
	077	000	2	999	9	Sullivan		153	6	0000	
	078	000	2	999	9	Switzerland		155	6	0000	
	079	152	1			Tippecanoe		157	3	3920	
				031	5	Lafayette					40788
				064	5	West Lafayette					82862
				999	9	Balance of county					99999
	080	149	1	999	9	Tipton		159	6	3850	
	081	000	2	999	9	Union		161	6	0000	
	082	089	1			Vanderburgh		163	3	2440	
				014	3	Evansville					22000
				999	9	Balance of county					99999
	083	280	1	999	9	Vermillion		165	6	8320	
	084	280	1			Vigo		167	3	8320	
				058	4	Terre Haute					75428
				999	9	Balance of county					99999
	085	000	2			Wabash		169	5	0000	
				061	6	Wabash					79370
				999	9	Balance of county					99999
	086	000	2	999	9	Warren		171	6	0000	
	087	089	1	999	9	Warrick		173	5	2440	
	088	000	2	999	9	Washington		175	6	0000	
	089	000	2			Wayne		177	4	0000	
				052	5	Richmond					64260
				999	9	Balance of county					99999
	090	102	1	999	9	Wells		179	5	2760	
	091	000	2	999	9	White		181	6	0000	
	092	102	1	999	9	Whitley		183	5	2760	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
16						Iowa	19				
	097	265	1			Woodbury		193	4	7720	
				026	4	Sioux City					73335
				999	9	Balance of county					99999
	098	000	2	999	9	Worth		195	6	0000	
	099	000	2	999	9	Wright		197	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
17						Kansas	20				
	089			999	9	Shawnee, con.		177	3	8440	
						Balance of county					99999
	090	000	2	999	9	Sheridan		179	6	0000	
	091	000	2	999	9	Sherman		181	6	0000	
	092	000	2	999	9	Smith		183	6	0000	
	093	000	2	999	9	Stafford		185	6	0000	
	094	000	2	999	9	Stanton		187	6	0000	
	095	000	2	999	9	Stevens		189	6	0000	
	096	000	2	999	9	Sumner		191	5	0000	
	097	000	2	999	9	Thomas		193	6	0000	
	098	000	2	999	9	Trego		195	6	0000	
	099	000	2	999	9	Wabaunsee		197	6	0000	
	100	000	2	999	9	Wallace		199	6	0000	
	101	000	2	999	9	Washington		201	6	0000	
	102	000	2	999	9	Wichita		203	6	0000	
	103	000	2	999	9	Wilson		205	6	0000	
	104	000	2	999	9	Woodson		207	6	0000	
	105	145	1			Wyandotte		209	3	3760	
				014	3	Kansas City					36000
				999	9	Balance of county					99999

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
18						Kentucky	21				
	049	000	2	999	9	Harrison		097	6	0000	
	050	000	2	999	9	Hart		099	6	0000	
	051	089	1			Henderson		101	5	2440	
				012	5	Henderson					35866
				999	9	Balance of county					99999
	052	000	2	999	9	Henry		103	6	0000	
	053	000	2	999	9	Hickman		105	6	0000	
	054	000	2			Hopkins		107	5	0000	
				018	6	Madisonville					49368
				999	9	Balance of county					99999
	055	000	2	999	9	Jackson		109	6	0000	
	056	169	1			Jefferson		111	1	4520	
				015	6	Jeffersontown					40222
				017	2	Louisville					48000
				027	6	St. Matthews					67944
				028	6	Shively					70284
				999	9	Balance of county					99999
	057	163	1			Jessamine		113	5	4280	
				022	6	Nicholasville					56136
				999	9	Balance of county					99999
	058	000	2	999	9	Johnson		115	6	0000	
	059	057	1			Kenton		117	3	1640	
				003	5	Covington					17848
				006	6	Erlanger					25300
				014	6	Independence					39142
				999	9	Balance of county					99999
	060	000	2	999	9	Knott		119	6	0000	
	061	000	2	999	9	Knox		121	5	0000	
	062	000	2	999	9	Larue		123	6	0000	
	063	000	2	999	9	Laurel		125	5	0000	
	064	000	2	999	9	Lawrence		127	6	0000	
	065	000	2	999	9	Lee		129	6	0000	
	066	000	2	999	9	Leslie		131	6	0000	
	067	000	2	999	9	Letcher		133	5	0000	
	068	000	2	999	9	Lewis		135	6	0000	
	069	000	2	999	9	Lincoln		137	6	0000	
	070	000	2	999	9	Livingston		139	6	0000	
	071	000	2	999	9	Logan		141	6	0000	
	072	000	2	999	9	Lyon		143	6	0000	
	073	000	2			McCracken		145	4	0000	
				024	5	Paducah					58836
				999	9	Balance of county					99999
	074	000	2	999	9	McCreary		147	6	0000	
	075	000	2	999	9	McLean		149	6	0000	
	076	163	1			Madison		151	4	4280	
				026	6	Richmond					65226
				999	9	Balance of county					99999
	077	000	2	999	9	Magoffin		153	6	0000	
	078	000	2	999	9	Marion		155	6	0000	
	079	000	2	999	9	Marshall		157	5	0000	
	080	000	2	999	9	Martin		159	6	0000	
	081	000	2	999	9	Mason		161	6	0000	
	082	000	2	999	9	Meade		163	6	0000	
	083	000	2	999	9	Menifee		165	6	0000	
	084	000	2	999	9	Mercer		167	6	0000	
	085	000	2	999	9	Metcalfe		169	6	0000	
	086	000	2	999	9	Monroe		171	6	0000	
	087	000	2	999	9	Montgomery		173	6	0000	
	088	000	2	999	9	Morgan		175	6	0000	
	089	000	2	999	9	Muhlenberg		177	5	0000	
	090	000	2	999	9	Nelson		179	5	0000	
	091	000	2	999	9	Nicholas		181	6	0000	
	092	000	2	999	9	Ohio		183	6	0000	
	093	169	1	999	9	Oldham		185	5	4520	
	094	000	2	999	9	Owen		187	6	0000	
	095	000	2	999	9	Owsley		189	6	0000	
	096	057	1	999	9	Pendleton		191	6	1640	
	097	000	2	999	9	Perry		193	5	0000	
	098	000	2	999	9	Pike		195	4	0000	
	099	000	2	999	9	Powell		197	6	0000	
	100	000	2			Pulaski		199	5	0000	
				029	6	Somerset					71688
				999	9	Balance of county					99999
	101	000	2	999	9	Robertson		201	6	0000	

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
18						Kentucky	21				
	102	000	2	999	9	Rockcastle		203	6	0000	
	103	000	2	999	9	Rowan		205	6	0000	
	104	000	2	999	9	Russell		207	6	0000	
	105	163	1			Scott		209	6	4280	
				010	6	Georgetown					30700
				999	9	Balance of county					99999
	106	000	2	999	9	Shelby		211	6	0000	
	107	000	2	999	9	Simpson		213	6	0000	
	108	000	2	999	9	Spencer		215	6	0000	
	109	000	2	999	9	Taylor		217	6	0000	
	110	000	2	999	9	Todd		219	6	0000	
	111	000	2	999	9	Trigg		221	6	0000	
	112	000	2	999	9	Trimble		223	6	0000	
	113	000	2	999	9	Union		225	6	0000	
	114	000	2			Warren		227	4	0000	
				002	5	Bowling Green					08902
				999	9	Balance of county					99999
	115	000	2	999	9	Washington		229	6	0000	
	116	000	2	999	9	Wayne		231	6	0000	
	117	000	2	999	9	Webster		233	6	0000	
	118	000	2	999	9	Whitley		235	5	0000	
	119	000	2	999	9	Wolfe		237	6	0000	
	120	163	1	999	9	Woodford		239	6	4280	

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
19						Louisiana	22				
	001	151	1			Acadia	001	4		3880	
				008	6	Crowley					18650
				009	6	Eunice, part					24565
				999	9	Balance of parish					99999
	002	000	2	999	9	Allen	003	6		0000	
	003	024	1	999	9	Ascension	005	4		0760	
	004	000	2	999	9	Assumption	007	6		0000	
	005	000	2	999	9	Avoyelles	009	5		0000	
	006	000	2	999	9	Beauregard	011	5		0000	
	007	000	2	999	9	Bienville	013	6		0000	
	008	264	1			Bossier	015	4		7680	
				007	4	Bossier City					08920
				026	3	Shreveport, part					70000
				999	9	Balance of parish					99999
	009	264	1			Caddo	017	3		7680	
				026	3	Shreveport, part					70000
				999	9	Balance of parish					99999
	010	153	1			Calcasieu	019	3		3960	
				016	4	Lake Charles					41155
				028	6	Sulphur					73640
				999	9	Balance of parish					99999
	011	000	2	999	9	Caldwell	021	6		0000	
	012	000	2	999	9	Cameron	023	6		0000	
	013	000	2	999	9	Catahoula	025	6		0000	
	014	000	2	999	9	Claiborne	027	6		0000	
	015	000	2	999	9	Concordia	029	6		0000	
	016	000	2	999	9	De Soto	031	5		0000	
	017	024	1			East Baton Rouge	033	2		0760	
				003	6	Baker					03985
				005	3	Baton Rouge					05000
				999	9	Balance of parish					99999
	018	000	2	999	9	East Carroll	035	6		0000	
	019	000	2	999	9	East Feliciana	037	6		0000	
	020	000	2	999	9	Evangeline	039	5		0000	
	021	000	2	999	9	Franklin	041	6		0000	
	022	000	2	999	9	Grant	043	6		0000	
	023	000	2			Iberia	045	4		0000	
				021	5	New Iberia					54035
				999	9	Balance of parish					99999
	024	000	2	999	9	Iberville	047	5		0000	
	025	000	2	999	9	Jackson	049	6		0000	
	026	196	1			Jefferson	051	2		5560	
				010	6	Gretna					31915
				014	4	Kenner					39475
				031	6	Westwego					81165
				999	9	Balance of parish					99999
	027	000	2			Jefferson Davis	053	5		0000	
				013	6	Jennings					38355
				999	9	Balance of parish					99999
	028	151	1			Lafayette	055	3		3880	
				015	4	Lafayette					40735
				999	9	Balance of parish					99999
	029	126	1			Lafourche	057	4		3350	
				029	6	Thibodaux					75425
				999	9	Balance of parish					99999
	030	000	2	999	9	La Salle	059	6		0000	
	031	000	2			Lincoln	061	5		0000	
				025	6	Ruston					66655
				999	9	Balance of parish					99999
	032	024	1	999	9	Livingston	063	4		0760	
	033	000	2	999	9	Madison	065	6		0000	
	034	000	2			Morehouse	067	5		0000	
				004	6	Bastrop					04685
				999	9	Balance of parish					99999
	035	000	2			Natchitoches	069	5		0000	
				020	6	Natchitoches					53545
				999	9	Balance of parish					99999
	036	196	1	022	2	Orleans, coext. with New Orleans city	071	2		5560	55000
	037	187	1			Ouachita	073	3		5200	
				018	4	Monroe					51410
				030	6	West Monroe					80955
				999	9	Balance of parish					99999
	038	196	1	999	9	Plaquemines	075	5		5560	
	039	000	2	999	9	Pointe Coupee	077	6		0000	

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
19						Louisiana	22				
	040	006	1			Rapides		079	3	0220	
				002	5	Alexandria					00975
				024	6	Pineville					60530
				999	9	Balance of parish					99999
	041	000	2	999	9	Red River		081	6	0000	
	042	000	2	999	9	Richland		083	6	0000	
	043	000	2	999	9	Sabine		085	6	0000	
	044	196	1	999	9	St. Bernard		087	4	5560	
	045	196	1	999	9	St. Charles		089	5	5560	
	046	000	2	999	9	St. Helena		091	6	0000	
	047	196	1	999	9	St. James		093	6	5560	
	048	196	1	999	9	St. John the Baptist		095	5	5560	
	049	151	1			St. Landry		097	4	3880	
				009	6	Eunice, part					24565
				023	6	Opelousas					58045
				999	9	Balance of parish					99999
	050	151	1	999	9	St. Martin		099	5	3880	
	051	000	2			St. Mary		101	4	0000	
				019	6	Morgan City					52040
				999	9	Balance of parish					99999
	052	196	1			St. Tammany		103	3	5560	
				027	6	Slidell					70805
				999	9	Balance of parish					99999
	053	000	2			Tangipahoa		105	4	0000	
				011	6	Hammond					32755
				999	9	Balance of parish					99999
	054	000	2	999	9	Tensas		107	6	0000	
	055	126	1			Terrebonne		109	4	3350	
				012	5	Houma					36255
				999	9	Balance of parish					99999
	056	000	2	999	9	Union		111	6	0000	
	057	000	2			Vermilion		113	4	0000	
				001	6	Abbeville					00100
				999	9	Balance of parish					99999
	058	000	2	999	9	Vernon		115	4	0000	
	059	000	2			Washington		117	5	0000	
				006	6	Bogalusa					08150
				999	9	Balance of parish					99999
	060	264	1			Webster		119	5	7680	
				017	6	Minden					50885
				999	9	Balance of parish					99999
	061	024	1	999	9	West Baton Rouge		121	6	0760	
	062	000	2	999	9	West Carroll		123	6	0000	
	063	000	2	999	9	West Feliciana		125	6	0000	
	064	000	2	999	9	Winn		127	6	0000	

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
20						Maine	23				
	001	162	1			Androscoggin	001	3	4243		
				001	6	Auburn					02060
				005	5	Lewiston					38740
				999	9	Balance of county					99999
	002	000	2			Aroostook	003	4	0000		
				007	6	Presque Isle					60825
				999	9	Balance of county					99999
	003	219	1			Cumberland	005	3	6403		
				006	4	Portland					60545
				009	6	South Portland					71990
				011	6	Westbrook					82105
				999	9	Balance of county					99999
	004	000	2	999	9	Franklin	007	5	0000		
	005	000	2	999	9	Hancock	009	5	0000		
	006	000	2			Kennebec	011	3	0000		
				002	6	Augusta					02100
				010	6	Waterville					80740
				999	9	Balance of county					99999
	007	000	2	999	9	Knox	013	5	0000		
	008	000	2	999	9	Lincoln	015	5	0000		
	009	000	2	999	9	Oxford	017	4	0000		
	010	022	1			Penobscot	019	3	0733		
				003	5	Bangor					02795
				999	9	Balance of county					99999
	011	000	2	999	9	Piscataquis	021	6	0000		
	012	000	2	999	9	Sagadahoc	023	5	0000		
	013	000	2	999	9	Somerset	025	5	0000		
	014	000	2	999	9	Waldo	027	5	0000		
	015	000	2	999	9	Washington	029	5	0000		
	016	000	2			York	031	3	0000		
				004	6	Biddeford					04860
				008	6	Saco					64675
				999	9	Balance of county					99999

Vital Statistics Codes					FIPS Codes					
St	Cnty	P/MSA	M/NM	City P/S	Area Names	St	Cnty	P/S	P/MSA	Place
21					Maryland	24				
	001	066	1		Allegany		001	4	1900	
				007 6	Cumberland					21325
				999 9	Balance of county					99999
	002	021	1		Anne Arundel		003	2	0720	
				002 5	Annapolis					01600
				999 9	Balance of county					99999
	003	021	1	999 9	Baltimore		005	1	0720	
	004	021	1	003 1	Baltimore city		510	1	0720	04000
	005	296	1	999 9	Calvert		009	4	8840	
	006	000	2	999 9	Caroline		011	5	0000	
	007	021	1		Carroll		013	3	0720	
				018 6	Westminster					83100
				999 9	Balance of county					99999
	008	304	1	999 9	Cecil		015	4	9160	
	009	296	1	999 9	Charles		017	3	8840	
	010	000	2		Dorchester		019	5	0000	
				005 6	Cambridge					12400
				999 9	Balance of county					99999
	011	296	1		Frederick		021	3	8840	
				008 5	Frederick					30325
				999 9	Balance of county					99999
	012	000	2	999 9	Garrett		023	5	0000	
	013	021	1		Harford		025	3	0720	
				001 6	Aberdeen					00125
				999 9	Balance of county					99999
	014	021	1	999 9	Howard		027	3	0720	
	015	000	2	999 9	Kent		029	6	0000	
	016	296	1		Montgomery		031	1	8840	
				009 5	Gaithersburg					31175
				015 5	Rockville					67675
				017 6	Takoma Park, part					76650
				999 9	Balance of county					99999
	017	296	1		Prince George's		033	1	8840	
				004 5	Bowie					08775
				006 6	College Park					18750
				010 6	Greenbelt					34775
				012 6	Hyattsville					41250
				013 6	Laurel					45900
				014 6	New Carrollton					55400
				017 6	Takoma Park, part					76650
				999 9	Balance of county					99999
	018	021	1	999 9	Queen Anne's		035	5	0720	
	019	000	2	999 9	St. Mary's		037	4	0000	
	020	000	2	999 9	Somerset		039	6	0000	
	021	000	2	999 9	Talbot		041	5	0000	
	022	119	1		Washington		043	3	3180	
				011 5	Hagerstown					36075
				999 9	Balance of county					99999
	023	000	2		Wicomico		045	4	0000	
				016 6	Salisbury					69925
				999 9	Balance of county					99999
	024	000	2	999 9	Worcester		047	5	0000	

Vital Statistics Codes				FIPS Codes							
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
22						Massachusetts	25				
	001	023	1			Barnstable		001	3	0743	
				008	5	Barnstable town					03635
				031	5	Falmouth town					23105
				999	9	Balance of county					99999
	002	218	1			Berkshire		003	3	6323	
				062	6	North Adams					46225
				067	5	Pittsfield					53960
				999	9	Balance of county					99999
	003	037	1			Bristol		005	1	1123	
				007	5	Attleboro					02690
				023	5	Dartmouth town					16425
				029	6	Fairhaven town					22130
				030	4	Fall River					23000
				059	4	New Bedford					45000
				064	5	North Attleborough town					46575
				077	6	Somerset town					62430
				083	5	Taunton					69170
				999	9	Balance of county					99999
	004	000	2	999	9	Dukes		007	6	0000	
	005	037	1			Essex		009	1	1123	
				003	6	Amesbury town					01185
				005	5	Andover town					01465
				010	5	Beverly					05595
				022	6	Danvers town					16250
				035	5	Gloucester					26150
				036	4	Haverhill					29405
				041	4	Lawrence					34550
				046	4	Lynn					37490
				047	6	Lynnfield town					37560
				049	6	Marblehead town					38400
				054	5	Methuen town					40675
				060	6	Newburyport					45245
				066	5	Peabody					52490
				074	5	Salem					59105
				075	5	Saugus town					60015
				082	6	Swampscott town					68645
				999	9	Balance of county					99999
	006	000	2	999	9	Franklin		011	4	0000	
	007	271	1			Hampden		013	2	8003	
				002	5	Agawam town					00800
				020	4	Chicopee					13660
				027	6	East Longmeadow town					19645
				038	5	Holyoke					30840
				044	6	Longmeadow town					36300
				079	3	Springfield					67000
				090	5	Westfield					76030
				091	5	West Springfield town					77850
				999	9	Balance of county					99999
	008	271	1			Hampshire		015	3	8003	
				004	5	Amherst town					01325
				026	6	Easthampton town					19330
				063	5	Northampton					46330
				999	9	Balance of county					99999
	009	037	1			Middlesex		017	0	1123	
				006	5	Arlington town					01605
				009	6	Belmont town					05070
				011	5	Billerica town					05805
				016	6	Burlington town					09840
				017	4	Cambridge					11000
				018	5	Chelmsford town					13135
				025	5	Dracut town					17475
				028	5	Everett					21990
				033	4	Framingham town					24925
				039	6	Hudson town					31540
				043	5	Lexington town					35215
				045	3	Lowell					37000
				048	4	Malden					37875
				050	5	Marlborough					38715
				051	6	Maynard town					39625
				052	4	Medford					39835
				053	5	Melrose					40115
				057	5	Natick town					43895
				061	4	Newton					45560
				071	6	Reading town					56130

Vital Statistics Codes				FIPS Codes			
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	Place
22						Massachusetts	
	009					Middlesex, con.	25
				078	4	Somerville	017 0 1123 62535
				080	6	Stoneham town	67665
				084	5	Tewksbury town	69415
				085	6	Wakefield town	72215
				086	4	Waltham	72600
				087	5	Watertown town	73405
				095	6	Wilmington town	80230
				096	6	Winchester town	80510
				098	5	Woburn	81035
				999	9	Balance of county	99999
010	000	2		999	9	Nantucket	019 6 0000
011	037	1				Norfolk	021 1 1123
				013	5	Braintree town	07665
				015	4	Brookline town	09175
				024	6	Dedham town	16495
				037	6	Holbrook town	30455
				056	5	Milton town	41690
				058	5	Needham town	44105
				065	5	Norwood town	50250
				069	4	Quincy	55745
				070	5	Randolph town	55955
				081	5	Stoughton town	67945
				089	5	Wellesley town	74175
				092	6	Westwood town	78690
				093	4	Weymouth town	78865
				999	9	Balance of county	99999
012	037	1				Plymouth	023 2 1123
				001	6	Abington town	00170
				014	4	Brockton	09000
				040	6	Hull town	31645
				068	5	Plymouth town	54310
				073	6	Rockland town	57775
				094	6	Whitman town	79530
				999	9	Balance of county	99999
013	037	1				Suffolk	025 1 1123
				012	1	Boston	07000
				019	5	Chelsea	13205
				072	5	Revere	56585
				097	6	Winthrop town	80930
014	037	1				Worcester	027 1 1123
				021	6	Clinton town	14395
				032	5	Fitchburg	23875
				034	6	Gardner	25485
				042	5	Leominster	35075
				055	5	Milford town	41165
				076	6	Shrewsbury town	61800
				088	6	Webster town	73895
				099	3	Worcester	82000
				999	9	Balance of county	99999

Vital Statistics Codes				FIPS Codes				Place		
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St		Cnty	P/S
23						Michigan	26			
	063					Oakland, con.		125	0	2160
				032	4	Farmington Hills				27440
				033	5	Ferndale				27880
				049	6	Hazel Park				37420
				060	5	Madison Heights				50560
				074	5	Novi				59440
				075	5	Oak Park				59920
				078	4	Pontiac				65440
				084	4	Rochester Hills				69035
				087	4	Royal Oak				70040
				093	4	Southfield				74900
				100	4	Troy				80700
				103	4	Waterford township				84240
				105	4	West Bloomfield township				85490
				999	9	Balance of county				99999
	064	000	2	999	9	Oceana		127	6	0000
	065	000	2	999	9	Ogemaw		129	6	0000
	066	000	2	999	9	Ontonagon		131	6	0000
	067	000	2	999	9	Osceola		133	6	0000
	068	000	2	999	9	Oscoda		135	6	0000
	069	000	2	999	9	Otsego		137	6	0000
	070	112	1			Ottawa		139	3	3000
				038	5	Georgetown township				31880
				040	6	Grand Haven				33340
				051	5	Holland, part				38640
				999	9	Balance of county				99999
	071	000	2	999	9	Presque Isle		141	6	0000
	072	000	2	999	9	Roscommon		143	6	0000
	073	240	1			Saginaw		145	3	6960
				088	4	Saginaw				70520
				089	5	Saginaw township				70540
				999	9	Balance of county				99999
	074	076	1			St. Clair		147	3	2160
				080	5	Port Huron				65820
				999	9	Balance of county				99999
	075	000	2			St. Joseph		149	4	0000
				096	6	Sturgis				76960
				999	9	Balance of county				99999
	076	000	2	999	9	Sanilac		151	5	0000
	077	000	2	999	9	Schoolcraft		153	6	0000
	078	000	2			Shiawassee		155	4	0000
				076	6	Owosso				61940
				999	9	Balance of county				99999
	079	000	2	999	9	Tuscola		157	4	0000
	080	143	1	999	9	Van Buren		159	4	3720
	081	011	1			Washtenaw		161	2	0440
				005	3	Ann Arbor				03000
				110	6	Ypsilanti				89140
				111	5	Ypsilanti township				89160
				999	9	Balance of county				99999
	082	076	1			Wayne		163	0	2160
				003	5	Allen Park				01380
				018	4	Canton township				13120
				022	4	Dearborn				21000
				023	4	Dearborn Heights				21020
				025	0	Detroit				22000
				029	6	Ecorse				24740
				037	5	Garden City				31420
				043	6	Grosse Pointe Farms				35520
				044	6	Grosse Pointe Park				35540
				045	6	Grosse Pointe Woods				35580
				046	6	Hamtramck				36280
				047	6	Harper Woods				36700
				050	6	Highland Park				38180
				052	5	Inkster				40680
				058	5	Lincoln Park				47800
				059	3	Livonia				49000
				062	6	Melvindale				52940
				072	6	Northville township				59000
				077	6	Plymouth township				65088
				081	4	Redford township				67660
				082	6	River Rouge				68760
				083	6	Riverview				68880
				085	6	Romulus				69420

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
23						Michigan	26				
	082					Wayne, con.	163	0		2160	
				094	5	Southgate					74960
				097	4	Taylor					79000
				099	6	Trenton					80420
				104	6	Wayne					84940
				106	4	Westland					86000
				107	6	Woodhaven					88380
				108	5	Wyandotte					88900
				999	9	Balance of county					99999
	083	000	2			Wexford	165	5		0000	
				017	6	Cadillac					12320
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
24						Minnesota	27				
	062					Ramsey, con.	123	2		5120	
				070	6	White Bear Lake, part					69970
				999	9	Balance of county					99999
	063	000	2	999	9	Red Lake	125	6		0000	
	064	000	2	999	9	Redwood	127	6		0000	
	065	000	2	999	9	Renville	129	6		0000	
	066	000	2			Rice	131	5		0000	
				027	6	Faribault					20546
				048	6	Northfield, part					46924
				999	9	Balance of county					99999
	067	000	2	999	9	Rock	133	6		0000	
	068	000	2	999	9	Roseau	135	6		0000	
	069	080	1			St. Louis	137	3		2240	
				021	4	Duluth					17000
				032	6	Hibbing					28790
				999	9	Balance of county					99999
	070	183	1			Scott	139	4		5120	
				054	6	Prior Lake					52594
				064	6	Shakopee					59350
				999	9	Balance of county					99999
	071	183	1			Sherburne	141	5		5120	
				025	6	Elk River					18674
				061	5	St. Cloud, part					56896
				999	9	Balance of county					99999
	072	000	2	999	9	Sibley	143	6		0000	
	073	241	1			Stearns	145	3		6980	
				061	5	St. Cloud, part					56896
				999	9	Balance of county					99999
	074	000	2			Steele	147	5		0000	
				052	6	Owatonna					49300
				999	9	Balance of county					99999
	075	000	2	999	9	Stevens	149	6		0000	
	076	000	2	999	9	Swift	151	6		0000	
	077	000	2	999	9	Todd	153	6		0000	
	078	000	2	999	9	Traverse	155	6		0000	
	079	000	2	999	9	Wabasha	157	6		0000	
	080	000	2	999	9	Wadena	159	6		0000	
	081	000	2	999	9	Waseca	161	6		0000	
	082	183	1			Washington	163	3		5120	
				019	6	Cottage Grove					13456
				031	6	Hastings, part					27530
				051	6	Oakdale					47680
				067	6	Stillwater					62824
				070	6	White Bear Lake, part					69970
				073	6	Woodbury					71428
				999	9	Balance of county					99999
	083	000	2	999	9	Watsonwan	165	6		0000	
	084	000	2	999	9	Wilkin	167	6		0000	
	085	000	2			Winona	169	5		0000	
				072	5	Winona					71032
				999	9	Balance of county					99999
	086	183	1	999	9	Wright	171	4		5120	
	087	000	2	999	9	Yellow Medicine	173	6		0000	

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
26						Missouri	29				
	087					Ralls, con.		173	6	0000	
				999	9	Balance of county					99999
	088	000	2			Randolph		175	6	0000	
				038	6	Moberly					49034
				999	9	Balance of county					99999
	089	145	1			Ray		177	6	3760	
				015	6	Excelsior Springs, part					23086
				999	9	Balance of county					99999
	090	000	2			Reynolds		179	6	0000	
	091	000	2			Ripley		181	6	0000	
	092	243	1			St. Charles		183	3	7040	
				039	6	O'Fallon					54074
				046	4	St. Charles					64082
				049	5	St. Peters					65126
				999	9	Balance of county					99999
	093	000	2			St. Clair		185	6	0000	
	094	000	2			Ste. Genevieve		186	6	0000	
	095	000	2			St. Francois		187	5	0000	
				016	6	Farmington					23752
				999	9	Balance of county					99999
	096	243	1			St. Louis		189	1	7040	
				002	6	Ballwin					03160
				003	6	Bellefontaine Neighbors					04222
				005	6	Berkeley					04906
				007	6	Bridgeton					08398
				010	5	Chesterfield					13600
				011	6	Clayton					14572
				013	6	Crestwood					17218
				014	6	Creve Coeur					17272
				017	6	Ferguson					23986
				018	4	Florissant					24778
				023	6	Hazelwood					31276
				026	6	Jennings					37178
				031	5	Kirkwood					39044
				035	5	Maryland Heights					46586
				040	6	Overland					55550
				043	6	Richmond Heights					61706
				045	6	St. Ann					63956
				053	5	University City					75220
				056	6	Webster Groves					78154
				999	9	Balance of county					99999
	097	243	1			St. Louis city		510	2	7040	65000
	098	000	2			Saline		195	6	0000	
				034	6	Marshall					46316
				999	9	Balance of county					99999
	099	000	2			Schuyler		197	6	0000	
	100	000	2			Scotland		199	6	0000	
	101	000	2			Scott		201	5	0000	
				051	6	Sikeston, part					67790
				999	9	Balance of county					99999
	102	000	2			Shannon		203	6	0000	
	103	000	2			Shelby		205	6	0000	
	104	000	2			Stoddard		207	5	0000	
	105	000	2			Stone		209	6	0000	
	106	000	2			Sullivan		211	6	0000	
	107	000	2			Taney		213	5	0000	
	108	000	2			Texas		215	6	0000	
	109	000	2			Vernon		217	6	0000	
	110	243	1			Warren		219	6	7040	
	111	000	2			Washington		221	6	0000	
	112	000	2			Wayne		223	6	0000	
	113	270	1			Webster		225	6	7920	
	114	000	2			Worth		227	6	0000	
	115	000	2			Wright		229	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
28						Nebraska	31				
	059	000	2	999	9	McPherson		117	6	0000	
	060	000	2			Madison		119	5	0000	
				009	6	Norfolk					34615
				999	9	Balance of county					99999
	061	000	2	999	9	Merrick		121	6	0000	
	062	000	2	999	9	Morrill		123	6	0000	
	063	000	2	999	9	Nance		125	6	0000	
	064	000	2	999	9	Nemaha		127	6	0000	
	065	000	2	999	9	Nuckolls		129	6	0000	
	066	000	2	999	9	Otoe		131	6	0000	
	067	000	2	999	9	Pawnee		133	6	0000	
	068	000	2	999	9	Perkins		135	6	0000	
	069	000	2	999	9	Phelps		137	6	0000	
	070	000	2	999	9	Pierce		139	6	0000	
	071	000	2			Platte		141	5	0000	
				003	6	Columbus					10110
				999	9	Balance of county					99999
	072	000	2	999	9	Polk		143	6	0000	
	073	000	2	999	9	Red Willow		145	6	0000	
	074	000	2	999	9	Richardson		147	6	0000	
	075	000	2	999	9	Rock		149	6	0000	
	076	000	2	999	9	Saline		151	6	0000	
	077	206	1			Sarpy		153	3	5920	
				002	5	Bellevue					03950
				012	6	Papillion					38295
				999	9	Balance of county					99999
	078	000	2	999	9	Saunders		155	6	0000	
	079	000	2			Scotts Bluff		157	5	0000	
				013	6	Scottsbluff					44245
				999	9	Balance of county					99999
	080	000	2	999	9	Seward		159	6	0000	
	081	000	2	999	9	Sheridan		161	6	0000	
	082	000	2	999	9	Sherman		163	6	0000	
	083	000	2	999	9	Sioux		165	6	0000	
	084	000	2	999	9	Stanton		167	6	0000	
	085	000	2	999	9	Thayer		169	6	0000	
	086	000	2	999	9	Thomas		171	6	0000	
	087	000	2	999	9	Thurston		173	6	0000	
	088	000	2	999	9	Valley		175	6	0000	
	089	206	1	999	9	Washington		177	6	5920	
	090	000	2	999	9	Wayne		179	6	0000	
	091	000	2	999	9	Webster		181	6	0000	
	092	000	2	999	9	Wheeler		183	6	0000	
	093	000	2	999	9	York		185	6	0000	

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
29						Nevada	32				
	001	000	2	002	5	Carson City city		510	5	0000	09700
	002	000	2	999	9	Churchill		001	6	0000	
	003	159	1			Clark		003	1	4120	
				001	6	Boulder City					06500
				004	4	Henderson					31900
				005	2	Las Vegas					40000
				006	5	North Las Vegas					51800
				999	9	Balance of county					99999
	004	000	2	999	9	Douglas		005	5	0000	
	005	000	2			Elko		007	5	0000	
				003	6	Elko					22500
				999	9	Balance of county					99999
	006	000	2	999	9	Esmeralda		009	6	0000	
	007	000	2	999	9	Eureka		011	6	0000	
	008	000	2	999	9	Humboldt		013	6	0000	
	009	000	2	999	9	Lander		015	6	0000	
	010	000	2	999	9	Lincoln		017	6	0000	
	011	000	2	999	9	Lyon		019	6	0000	
	012	000	2	999	9	Mineral		021	6	0000	
	013	159	1	999	9	Nye		023	6	4120	
	014	000	2	999	9	Pershing		027	6	0000	
	015	000	2	999	9	Storey		029	6	0000	
	016	230	1			Washoe		031	2	6720	
				007	3	Reno					60600
				008	4	Sparks					68400
				999	9	Balance of county					99999
	017	000	2	999	9	White Pine		033	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
30						New Hampshire	33				
	001	000	2			Belknap		001	5	0000	
				006	6	Laconia					40180
				999	9	Balance of county					99999
	002	000	2	999	9	Carroll		003	5	0000	
	003	000	2			Cheshire		005	4	0000	
				005	6	Keene					39300
				999	9	Balance of county					99999
	004	000	2			Coos		007	5	0000	
				001	6	Berlin					05140
				999	9	Balance of county					99999
	005	000	2			Grafton		009	4	0000	
				007	6	Lebanon					41300
				999	9	Balance of county					99999
	006	037	1			Hillsborough		011	2	1123	
				008	4	Manchester					45140
				009	4	Nashua					50260
				999	9	Balance of county					99999
	007	000	2			Merrimack		013	3	0000	
				003	5	Concord					14200
				999	9	Balance of county					99999
	008	037	1			Rockingham		015	3	1123	
				010	5	Portsmouth					62900
				012	5	Salem town					66660
				999	9	Balance of county					99999
	009	037	1			Strafford		017	3	1123	
				004	5	Dover					18820
				011	5	Rochester					65140
				013	6	Somersworth					69940
				999	9	Balance of county					99999
	010	000	2			Sullivan		019	5	0000	
				002	6	Claremont					12900
				999	9	Balance of county					99999

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
33						New York	36				
	042			083	5	Saratoga, con.		091	3	0160	
				999	9	Saratoga Springs					65255
						Balance of county					99999
	043	004	1			Schenectady		093	3	0160	
				062	6	Niskayuna town					51264
				081	5	Rotterdam town					63935
				085	4	Schenectady					65508
				999	9	Balance of county					99999
	044	004	1	999	9	Schoharie		095	5	0160	
	045	000	2	999	9	Schuyler		097	6	0000	
	046	000	2			Seneca		099	5	0000	
				031	6	Geneva, part					28640
				999	9	Balance of county					99999
	047	000	2			Steuben		101	4	0000	
				018	6	Corning					18256
				999	9	Balance of county					99999
	048	193	1			Suffolk		103	0	5380	
				004	6	Babylon village					03408
				048	5	Lindenhurst village					42554
				070	6	Patchogue village					56660
				999	9	Balance of county					99999
	049	000	2	999	9	Sullivan		105	4	0000	
	050	031	1	999	9	Tioga		107	4	0960	
	051	000	2			Tompkins		109	4	0000	
				041	5	Ithaca					38077
				999	9	Balance of county					99999
	052	000	2			Ulster		111	3	0000	
				045	6	Kingston					39727
				999	9	Balance of county					99999
	053	109	1			Warren		113	4	2975	
				033	6	Glens Falls					29333
				999	9	Balance of county					99999
	054	109	1	999	9	Washington		115	4	2975	
	055	236	1	999	9	Wayne		117	4	6840	
	056	197	1			Westchester		119	1	5600	
				037	6	Harrison village					32402
				052	6	Mamaroneck village					44831
				058	4	Mount Vernon					49121
				060	4	New Rochelle					50617
				068	6	Ossining village					55530
				071	6	Peekskill					56979
				074	6	Port Chester village					59223
				082	6	Rye					64309
				084	6	Scarsdale village					65431
				090	6	Tarrytown village					73176
				100	5	White Plains					81677
				101	3	Yonkers					84000
				102	5	Yorktown town					84077
				999	9	Balance of county					99999
	057	000	2	999	9	Wyoming		121	5	0000	
	058	000	2	999	9	Yates		123	6	0000	

Vital Statistics Codes				FIPS Codes				
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St Cnty P/S P/MSA	Place
34						North Carolina	37	
	036			999	9	Gaston, con.	071 3 1520	
						Balance of county		99999
	037	000	2	999	9	Gates	073 6 0000	
	038	000	2	999	9	Graham	075 6 0000	
	039	000	2	999	9	Granville	077 5 0000	
	040	000	2	999	9	Greene	079 6 0000	
	041	116	1			Guilford	081 2 3120	
				019	3	Greensboro		28000
				024	4	High Point, part		31400
				027	6	Kernersville, part		35600
				999	9	Balance of county		99999
	042	000	2			Halifax	083 4 0000	
				040	6	Roanoke Rapids		56900
				999	9	Balance of county		99999
	043	000	2	999	9	Harnett	085 4 0000	
	044	000	2	999	9	Haywood	087 5 0000	
	045	000	2	999	9	Henderson	089 4 0000	
	046	000	2	999	9	Hertford	091 6 0000	
	047	000	2	999	9	Hoke	093 6 0000	
	048	000	2	999	9	Hyde	095 6 0000	
	049	000	2			Iredell	097 4 0000	
				045	6	Statesville		64740
				999	9	Balance of county		99999
	050	000	2	999	9	Jackson	099 5 0000	
	051	226	1	999	9	Johnston	101 4 6640	
	052	000	2	999	9	Jones	103 6 0000	
	053	000	2			Lee	105 5 0000	
				043	6	Sanford		59280
				999	9	Balance of county		99999
	054	000	2			Lenoir	107 4 0000	
				028	5	Kinston		35920
				999	9	Balance of county		99999
	055	051	1	999	9	Lincoln	109 4 1520	
	056	000	2	999	9	McDowell	111 5 0000	
	057	000	2	999	9	Macon	113 6 0000	
	058	014	1	999	9	Madison	115 6 0480	
	059	000	2	999	9	Martin	117 5 0000	
	060	051	1			Mecklenburg	119 1 1520	
				009	2	Charlotte		12000
				033	6	Matthews		41960
				034	6	Mint Hill		43480
				999	9	Balance of county		99999
	061	000	2	999	9	Mitchell	121 6 0000	
	062	000	2	999	9	Montgomery	123 6 0000	
	063	000	2	999	9	Moore	125 4 0000	
	064	238	1			Nash	127 4 6895	
				041	5	Rocky Mount, part		57500
				999	9	Balance of county		99999
	065	305	1			New Hanover	129 3 9200	
				048	4	Wilmington		74440
				999	9	Balance of county		99999
	066	000	2	999	9	Northampton	131 6 0000	
	067	136	1			Onslow	133 3 3605	
				025	5	Jacksonville		34200
				999	9	Balance of county		99999
	068	226	1			Orange	135 4 6640	
				006	6	Carrboro		10620
				008	5	Chapel Hill, part		11800
				011	3	Durham, part		19000
				999	9	Balance of county		99999
	069	000	2	999	9	Pamlico	137 6 0000	
	070	000	2			Pasquotank	139 5 0000	
				013	6	Elizabeth City, part		20580
				999	9	Balance of county		99999
	071	000	2	999	9	Pender	141 5 0000	
	072	000	2	999	9	Perquimans	143 6 0000	
	073	000	2	999	9	Person	145 5 0000	
	074	117	1			Pitt	147 3 3150	
				020	5	Greenville		28080
				999	9	Balance of county		99999
	075	000	2	999	9	Polk	149 6 0000	
	076	116	1			Randolph	151 3 3120	
				002	6	Asheboro		02080
				024	4	High Point, part		31400

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
34						North Carolina	37				
	076			999	9	Randolph, con.		151	3	3120	
				999	9	Balance of county					99999
	077	000	2	999	9	Richmond		153	5	0000	
	078	000	2			Robeson		155	3	0000	
				032	6	Lumberton					39700
				999	9	Balance of county					99999
	079	000	2			Rockingham		157	4	0000	
				012	6	Eden					20080
				039	6	Reidsville					55900
				999	9	Balance of county					99999
	080	051	1			Rowan		159	3	1520	
				026	5	Kannapolis, part					35200
				042	6	Salisbury					58860
				999	9	Balance of county					99999
	081	000	2	999	9	Rutherford		161	4	0000	
	082	000	2	999	9	Sampson		163	5	0000	
	083	000	2			Scotland		165	5	0000	
				029	6	Laurinburg					37220
				999	9	Balance of county					99999
	084	000	2			Stanly		167	4	0000	
				001	6	Albemarle					00680
				999	9	Balance of county					99999
	085	116	1	999	9	Stokes		169	5	3120	
	086	000	2	999	9	Surry		171	4	0000	
	087	000	2	999	9	Swain		173	6	0000	
	088	000	2	999	9	Transylvania		175	5	0000	
	089	000	2	999	9	Tyrrell		177	6	0000	
	090	051	1			Union		179	4	1520	
				035	6	Monroe					43920
				999	9	Balance of county					99999
	091	000	2			Vance		181	5	0000	
				022	6	Henderson					30660
				999	9	Balance of county					99999
	092	226	1			Wake		183	2	6640	
				007	5	Cary					10740
				015	6	Garner					25480
				038	3	Raleigh					55000
				999	9	Balance of county					99999
	093	000	2	999	9	Warren		185	6	0000	
	094	000	2	999	9	Washington		187	6	0000	
	095	000	2			Watauga		189	5	0000	
				004	6	Boone					07080
				999	9	Balance of county					99999
	096	110	1			Wayne		191	3	2980	
				017	5	Goldsboro					26880
				999	9	Balance of county					99999
	097	000	2	999	9	Wilkes		193	4	0000	
	098	000	2			Wilson		195	4	0000	
				049	5	Wilson					74540
				999	9	Balance of county					99999
	099	116	1	999	9	Yadkin		197	5	3120	
	100	000	2	999	9	Yancey		199	6	0000	

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
36						Ohio	39				
	083					Warren, con.		165	3	1640	
				071	6	Lebanon					42364
				080	6	Mason					48188
				088	5	Middletown, part					49840
				999	9	Balance of county					99999
	084	211	1			Washington		167	4	6020	
				078	6	Marietta					47628
				999	9	Balance of county					99999
	085	000	2			Wayne		169	3	0000	
				098	6	Norton, part					57260
				150	6	Wooster					86548
				999	9	Balance of county					99999
	086	000	2			Williams		171	5	0000	
	087	282	1			Wood		173	3	8400	
				018	5	Bowling Green					07972
				054	6	Fostoria, part					28014
				106	6	Perrysburg					62148
				999	9	Balance of county					99999
	088	000	2			Wyandot		175	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
37						Oklahoma	40				
	074			999	9	Washington, con.		147	5	0000	
						Balance of county					99999
	075	000	2	999	9	Washita		149	6	0000	
	076	000	2	999	9	Woods		151	6	0000	
	077	000	2			Woodward		153	6	0000	
				037	6	Woodward					82150
				999	9	Balance of county					99999

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
38						Oregon	41				
	030			026	6	Umatilla, con.	059	4	0000		57150
				999	9	Pendleton					99999
	031	000	2			Balance of county					
				018	6	Union	061	6	0000		40350
				999	9	La Grande					99999
				999	9	Balance of county					
	032	000	2	999	9	Wallowa	063	6	0000		
	033	000	2			Wasco	065	6	0000		
				006	6	City of the Dalles					13425
				999	9	Balance of county					99999
	034	220	1			Washington	067	2	6440		
				004	4	Beaverton					05350
				010	6	Forest Grove					26200
				015	5	Hillsboro					34100
				019	5	Lake Oswego, part					40550
				027	2	Portland, part					59000
				031	5	Tigard					73650
				032	6	Tualatin, part					74950
				999	9	Balance of county					99999
	035	000	2	999	9	Wheeler	069	6	0000		
	036	220	1			Yamhill	071	4	6440		
				021	6	McMinnville					45000
				024	6	Newberg					52100
				999	9	Balance of county					99999

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
39						Pennsylvania	42				
	016	000	2	999	9	Clarion		031	5	0000	
	017	000	2	999	9	Clearfield		033	4	0000	
	018	000	2	999	9	Clinton		035	5	0000	
	019	259	1			Columbia		037	4	7560	
				009	6	Berwick borough					05888
				013	6	Bloomsburg					07128
				999	9	Balance of county					99999
	020	000	2			Crawford		039	4	0000	
				069	6	Meadville					48360
				999	9	Balance of county					99999
	021	121	1			Cumberland		041	3	3240	
				020	6	Carlisle borough					11272
				031	6	East Pennsboro township					21680
				038	6	Hampden township					32296
				057	6	Lower Allen township					44832
				122	6	Upper Allen township					78736
				999	9	Balance of county					99999
	022	121	1			Dauphin		043	3	3240	
				040	4	Harrisburg					32800
				062	5	Lower Paxton township					45056
				116	6	Susquehanna township					75528
				117	6	Swatara township					75672
				999	9	Balance of county					99999
	023	214	1			Delaware		045	1	6160	
				005	6	Aston township					03336
				023	5	Chester					13208
				026	6	Darby borough					18152
				043	5	Haverford township					33144
				055	6	Lansdowne borough					41440
				068	6	Marple township					47616
				070	6	Middletown township					49136
				080	6	Nether Providence Township					53112
				083	6	Newtown township					54224
				099	5	Radnor Township					63268
				101	5	Ridley township					64800
				110	6	Springfield					73040
				123	6	Upper Chichester township					78776
				124	4	Upper Darby township					79000
				146	6	Yeadon borough					86968
				999	9	Balance of county					99999
	024	000	2			Elk		047	5	0000	
	025	087	1			Erie		049	2	2360	
				034	3	Erie					24000
				072	5	Millcreek township					49600
				999	9	Balance of county					99999
	026	217	1			Fayette		051	3	6280	
				121	6	Uniontown					78528
				999	9	Balance of county					99999
	027	000	2			Forest		053	6	0000	
	028	000	2			Franklin		055	3	0000	
				021	6	Chambersburg borough					12536
				999	9	Balance of county					99999
	029	000	2			Fulton		057	6	0000	
	030	000	2			Greene		059	5	0000	
	031	000	2			Huntingdon		061	5	0000	
	032	000	2			Indiana		063	4	0000	
				048	6	Indiana borough					36816
				999	9	Balance of county					99999
	033	000	2			Jefferson		065	5	0000	
	034	000	2			Juniata		067	6	0000	
	035	259	1			Lackawanna		069	3	7560	
				019	6	Carbondale					11232
				027	6	Dunmore borough					20352
				104	4	Scranton					69000
				999	9	Balance of county					99999
	036	155	1			Lancaster		071	2	4000	
				025	6	Columbia borough					15384
				033	6	Ephrata borough					23832
				052	4	Lancaster					41216
				053	6	Lancaster township					41224
				067	5	Manheim township					46896
				999	9	Balance of county					99999
	037	000	2			Lawrence		073	4	0000	
				081	5	New Castle					53368

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
39						Pennsylvania	42				
	059	000	2	999	9	Tioga		117	5	0000	
	060	000	2	999	9	Union		119	5	0000	
	061	000	2			Venango		121	4	0000	
				089	6	Oil City					56456
				999	9	Balance of county					99999
	062	000	2			Warren		123	5	0000	
				133	6	Warren					81000
				999	9	Balance of county					99999
	063	217	1			Washington		125	3	6280	
				134	6	Washington					81328
				999	9	Balance of county					99999
	064	000	2	999	9	Wayne		127	5	0000	
	065	217	1			Westmoreland		129	2	6280	
				037	6	Greensburg					31200
				045	5	Hempfield township					33792
				049	6	Jeannette					37784
				058	6	Lower Burrell					44864
				078	6	Municipality of Murrysville borough					52332
				082	6	New Kensington					53736
				087	5	North Huntingdon township					55128
				999	9	Balance of county					99999
	066	259	1	999	9	Wyoming		131	5	7560	
	067	308	1			York		133	2	9280	
				039	6	Hanover borough					32448
				109	6	Springettsbury township					72992
				112	6	Spring Garden township					73168
				147	5	York					87048
				999	9	Balance of county					99999

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
40						Rhode Island	44				
	001	221	1			Bristol		001	5	6483	
				001	6	Barrington					04960
				002	6	Bristol					09460
				015	6	Warren town					73760
				999	9	Balance of county					99999
	002	221	1			Kent		003	3	6483	
				004	5	Coventry town					18640
				016	4	Warwick					74300
				999	9	Balance of county					99999
	003	000	2			Newport		005	4	0000	
				009	6	Middletown town					45460
				011	5	Newport					49960
				999	9	Balance of county					99999
	004	221	1			Providence		007	1	6483	
				003	6	Central Falls					14140
				005	4	Cranston					19180
				006	5	Cumberland town					20080
				007	4	East Providence					22960
				008	5	Johnston town					37720
				012	5	North Providence					51940
				013	4	Pawtucket					54640
				014	3	Providence					59000
				017	5	Woonsocket					80780
				999	9	Balance of county					99999
	005	221	1			Washington		009	3	6483	
				010	6	Narragansett town					48340
				999	9	Balance of county					99999

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
41						South Carolina	45				
	035	000	2			Marlboro		069	5	0000	
				003	6	Bennettsville					05680
				999	9	Balance of county					99999
	036	000	2			Newberry		071	5	0000	
				021	6	Newberry					49570
				999	9	Balance of county					99999
	037	000	2			Oconee		073	4	0000	
	038	000	2			Orangeburg		075	4	0000	
				024	6	Orangeburg					53080
				999	9	Balance of county					99999
	039	118	1			Pickens		077	4	3160	
				006	6	Clemson, part					14950
				008	6	Easley					21985
				999	9	Balance of county					99999
	040	062	1			Richland		079	2	1760	
				007	4	Columbia					16000
				017	6	Irmo, part					35890
				999	9	Balance of county					99999
	041	000	2			Saluda		081	6	0000	
	042	118	1			Spartanburg		083	3	3160	
				014	6	Greer, part					30985
				027	5	Spartanburg					68290
				999	9	Balance of county					99999
	043	275	1			Sumter		085	3	8140	
				029	5	Sumter					70405
				999	9	Balance of county					99999
	044	000	2			Union		087	5	0000	
	045	000	2			Williamsburg		089	5	0000	
	046	051	1			York		091	3	1520	
				025	5	Rock Hill					61405
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
42						South Dakota	46				
	055	000	2	999	9	Sanborn		111	6	0000	
	056	000	2	999	9	Shannon		113	6	0000	
	057	000	2	999	9	Spink		115	6	0000	
	058	000	2	999	9	Stanley		117	6	0000	
	059	000	2	999	9	Sully		119	6	0000	
	060	000	2	999	9	Todd		121	6	0000	
	061	000	2	999	9	Tripp		123	6	0000	
	062	000	2	999	9	Turner		125	6	0000	
	063	000	2	999	9	Union		127	6	0000	
	064	000	2	999	9	Walworth		129	6	0000	
	065	000	2			Yankton		135	6	0000	
				010	6	Yankton					73060
				999	9	Balance of county					99999
	066	000	2	999	9	Ziebach		137	6	0000	

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
43						Tennessee	47				
	082					Sullivan, con.		163	3	3660	
				024	5	Kingsport, part					39560
				999	9	Balance of county					99999
	083	192	1			Sumner		165	3	5360	
				017	6	Gallatin					28540
				019	6	Goodlettsville, part					29920
				021	5	Hendersonville					33280
				999	9	Balance of county					99999
	084	178	1	999	9	Tipton		167	5	4920	
	085	000	2	999	9	Trousdale		169	6	0000	
	086	140	1	999	9	Unicoi		171	6	3660	
	087	148	1	999	9	Union		173	6	3840	
	088	000	2	999	9	Van Buren		175	6	0000	
	089	000	2			Warren		177	5	0000	
				028	6	McMinnville					45100
				999	9	Balance of county					99999
	090	140	1			Washington		179	4	3660	
				023	5	Johnson City, part					38320
				999	9	Balance of county					99999
	091	000	2	999	9	Wayne		181	6	0000	
	092	000	2	999	9	Weakley		183	5	0000	
	093	000	2	999	9	White		185	6	0000	
	094	192	1			Williamson		187	4	5360	
				003	6	Brentwood					08280
				016	6	Franklin					27740
				999	9	Balance of county					99999
	095	192	1			Wilson		189	4	5360	
				027	6	Lebanon					41520
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
44						Texas	48				
230	167	1	999	9		Upshur	459	5		4420	
231	000	2	999	9		Upton	461	6		0000	
232	000	2				Uvalde	463	6		0000	
			160	6		Uvalde					74588
			999	9		Balance of county					99999
233	000	2				Val Verde	465	5		0000	
			041	5		Del Rio					19792
			999	9		Balance of county					99999
234	000	2	999	9		Van Zandt	467	5		0000	
235	292	1				Victoria	469	4		8750	
			162	4		Victoria					75428
			999	9		Balance of county					99999
236	000	2				Walker	471	4		0000	
			077	5		Huntsville					35528
			999	9		Balance of county					99999
237	127	1	999	9		Waller	473	6		3360	
238	000	2	999	9		Ward	475	6		0000	
239	000	2				Washington	477	5		0000	
			022	6		Brenham					10156
			999	9		Balance of county					99999
240	157	1				Webb	479	3		4080	
			091	3		Laredo					41464
			999	9		Balance of county					99999
241	000	2				Wharton	481	5		0000	
			050	6		El Campo					22864
			999	9		Balance of county					99999
242	000	2	999	9		Wheeler	483	6		0000	
243	302	1				Wichita	485	3		9080	
			026	6		Burkburnett					11368
			171	4		Wichita Falls, part					79000
			999	9		Balance of county					99999
244	000	2				Wilbarger	487	6		0000	
			161	6		Vernon					75308
			999	9		Balance of county					99999
245	000	2	999	9		Willacy	489	6		0000	
246	019	1				Williamson	491	3		0640	
			010	2		Austin, part					05000
			065	6		Georgetown					29336
			134	5		Round Rock, part					63500
			151	6		Taylor					71948
			999	9		Balance of county					99999
247	248	1	999	9		Wilson	493	6		7240	
248	000	2	999	9		Winkler	495	6		0000	
249	000	2	999	9		Wise	497	5		0000	
250	000	2	999	9		Wood	499	5		0000	
251	000	2	999	9		Yoakum	501	6		0000	
252	000	2	999	9		Young	503	6		0000	
253	000	2	999	9		Zapata	505	6		0000	
254	000	2	999	9		Zavala	507	6		0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
46						Vermont	50				
	001	000	2	999	9	Addison	001	5		0000	
	002	000	2	999	9	Bennington	003	5		0000	
	003	000	2	999	9	Caledonia	005	5		0000	
	004	044	1			Chittenden	007	3		1303	
				001	5	Burlington					10675
				003	6	South Burlington					66175
				999	9	Balance of county					99999
	005	000	2	999	9	Essex	009	6		0000	
	006	044	1	999	9	Franklin	011	5		1303	
	007	044	1	999	9	Grand Isle	013	6		1303	
	008	000	2	999	9	Lamoille	015	6		0000	
	009	000	2	999	9	Orange	017	5		0000	
	010	000	2	999	9	Orleans	019	6		0000	
	011	000	2			Rutland	021	4		0000	
				002	6	Rutland					61225
				999	9	Balance of county					99999
	012	000	2	999	9	Washington	023	4		0000	
	013	000	2	999	9	Windham	025	5		0000	
	014	000	2	999	9	Windsor	027	4		0000	

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
48						Washington	53				
	031	260	1			Snohomish		061	2	7600	
				006	6	Bothell, part					07380
				010	5	Edmonds					20750
				012	4	Everett					22640
				019	5	Lynnwood					40840
				020	6	Marysville					43955
				023	6	Mountlake Terrace					47490
				999	9	Balance of county					99999
	032	268	1			Spokane		063	2	7840	
				035	3	Spokane					67000
				999	9	Balance of county					99999
	033	000	2			Stevens		065	5	0000	
	034	205	1			Thurston		067	3	5910	
				017	6	Lacey					36745
				026	5	Olympia					51300
				999	9	Balance of county					99999
	035	000	2			Wahkiakum		069	6	0000	
	036	000	2			Walla Walla		071	5	0000	
				040	5	Walla Walla					75775
				999	9	Balance of county					99999
	037	026	1			Whatcom		073	3	0860	
				005	4	Bellingham					05280
				999	9	Balance of county					99999
	038	000	2			Whitman		075	5	0000	
				029	6	Pullman					56625
				999	9	Balance of county					99999
	039	306	1			Yakima		077	3	9260	
				036	6	Sunnyside					68750
				042	4	Yakima					80010
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
49						West Virginia	54				
	048	000	2	999	9	Tyler	095	6		0000	
	049	000	2	999	9	Upshur	097	6		0000	
	050	128	1			Wayne	099	5		3400	
				006	4	Huntington, part					39460
				999	9	Balance of county					99999
	051	000	2	999	9	Webster	101	6		0000	
	052	000	2	999	9	Wetzel	103	6		0000	
	053	000	2	999	9	Wirt	105	6		0000	
	054	211	1			Wood	107	4		6020	
				010	5	Parkersburg					62140
				013	6	Vienna					83500
				999	9	Balance of county					99999
	055	000	2	999	9	Wyoming	109	5		0000	

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
50						Wisconsin	55				
	001	000	2	999	9	Adams		001	6	0000	
	002	000	2	999	9	Ashland		003	6	0000	
	003	000	2	999	9	Barron		005	5	0000	
	004	000	2	999	9	Bayfield		007	6	0000	
	005	115	1			Brown		009	3	3080	
				001	6	Allouez village					01175
				003	6	Ashwaubenon village					03425
				011	6	De Pere					19775
				019	4	Green Bay					31000
				999	9	Balance of county					99999
	006	000	2	999	9	Buffalo		011	6	0000	
	007	000	2	999	9	Burnett		013	6	0000	
	008	013	1			Calumet		015	5	0460	
				002	4	Appleton, part					02375
				030	6	Menasha, part					50825
				999	9	Balance of county					99999
	009	082	1			Chippewa		017	4	2290	
				009	6	Chippewa Falls					14575
				012	4	Eau Claire, part					22300
				999	9	Balance of county					99999
	010	000	2	999	9	Clark		019	5	0000	
	011	000	2	999	9	Columbia		021	5	0000	
	012	000	2	999	9	Crawford		023	6	0000	
	013	173	1			Dane		025	2	4720	
				013	6	Fitchburg					25950
				026	3	Madison					48000
				034	6	Middleton					51575
				051	6	Sun Prairie					78600
				999	9	Balance of county					99999
	014	000	2			Dodge		027	4	0000	
				004	6	Beaver Dam					05900
				054	6	Watertown, part					83975
				999	9	Balance of county					99999
	015	000	2	999	9	Door		029	5	0000	
	016	080	1			Douglas		031	5	2240	
				052	5	Superior					78700
				999	9	Balance of county					99999
	017	000	2			Dunn		033	5	0000	
				032	6	Menomonie					51025
				999	9	Balance of county					99999
	018	082	1			Eau Claire		035	4	2290	
				012	4	Eau Claire, part					22300
				999	9	Balance of county					99999
	019	000	2	999	9	Florence		037	6	0000	
	020	000	2			Fond du Lac		039	4	0000	
				014	5	Fond du Lac					26275
				999	9	Balance of county					99999
	021	000	2	999	9	Forest		041	6	0000	
	022	000	2	999	9	Grant		043	5	0000	
	023	000	2			Green		045	5	0000	
				036	6	Monroe					53750
				999	9	Balance of county					99999
	024	000	2	999	9	Green Lake		047	6	0000	
	025	000	2	999	9	Iowa		049	6	0000	
	026	000	2	999	9	Iron		051	6	0000	
	027	000	2	999	9	Jackson		053	6	0000	
	028	000	2			Jefferson		055	4	0000	
				015	6	Fort Atkinson					26675
				054	6	Watertown, part					83975
				061	6	Whitewater, part					86925
				999	9	Balance of county					99999
	029	000	2	999	9	Juneau		057	6	0000	
	030	146	1			Kenosha		059	3	3800	
				024	4	Kenosha					39225
				044	6	Pleasant Prairie village					63300
				999	9	Balance of county					99999
	031	000	2	999	9	Kewaunee		061	6	0000	
	032	150	1			La Crosse		063	4	3870	
				025	4	La Crosse					40775
				042	6	Onalaska					59925
				999	9	Balance of county					99999
	033	000	2	999	9	Lafayette		065	6	0000	
	034	000	2	999	9	Langlade		067	6	0000	
	035	000	2	999	9	Lincoln		069	5	0000	

Vital Statistics Codes					FIPS Codes					
St	Cnty	P/MSA	M/NM	City P/S	Area Names	St	Cnty	P/S	P/MSA	Place
50					Wisconsin	55				
036	000	2			Manitowoc	071	4	0000		
				027	Manitowoc					48500
				053	Two Rivers					81325
				999	Balance of county					99999
037	298	1			Marathon	073	3	8940		
				029	Marshfield, part					49675
				056	Wausau					84475
				999	Balance of county					99999
038	000	2			Marinette	075	5	0000		
				028	Marinette					49300
				999	Balance of county					99999
039	000	2		999	Marquette	077	6	0000		
040	000	2		999	Menominee	078	6	0000		
041	182	1			Milwaukee	079	1	5080		
				007	Brown Deer village					10375
				010	Cudahy					17975
				016	Franklin					27300
				018	Glendale					29400
				020	Greendale village					31125
				021	Greenfield					31175
				035	Milwaukee, part					53000
				040	Oak Creek					58800
				048	Shorewood village					73725
				049	South Milwaukee					75125
				057	Wauwatosa					84675
				058	West Allis					85300
				060	Whitefish Bay village					86700
				999	Balance of county					99999
042	000	2		999	Monroe	081	5	0000		
043	000	2		999	Oconto	083	5	0000		
044	000	2		999	Oneida	085	5	0000		
045	013	1			Outagamie	087	3	0460		
				002	Appleton, part					02375
				023	Kaukauna					38800
				999	Balance of county					99999
046	182	1			Ozaukee	089	4	5080		
				008	Cedarburg					13375
				033	Mequon					51150
				999	Balance of county					99999
047	000	2		999	Pepin	091	6	0000		
048	183	1			Pierce	093	5	5120		
				046	River Falls, part					68275
				999	Balance of county					99999
049	000	2		999	Polk	095	5	0000		
050	000	2			Portage	097	4	0000		
				050	Stevens Point					77200
				999	Balance of county					99999
051	000	2		999	Price	099	6	0000		
052	225	1			Racine	101	3	6600		
				045	Racine					66000
				999	Balance of county					99999
053	000	2		999	Richland	103	6	0000		
054	138	1			Rock	105	3	3620		
				005	Beloit					06500
				022	Janesville					37825
				999	Balance of county					99999
055	000	2		999	Rusk	107	6	0000		
056	183	1			St. Croix	109	4	5120		
				046	River Falls, part					68275
				999	Balance of county					99999
057	000	2		999	Sauk	111	5	0000		
058	000	2		999	Sawyer	113	6	0000		
059	000	2		999	Shawano	115	5	0000		
060	262	1			Sheboygan	117	3	7620		
				047	Sheboygan					72975
				999	Balance of county					99999
061	000	2		999	Taylor	119	6	0000		
062	000	2		999	Trempealeau	121	5	0000		
063	000	2		999	Vernon	123	5	0000		
064	000	2		999	Vilas	125	6	0000		
065	000	2			Walworth	127	4	0000		
				061	Whitewater, part					86925
				999	Balance of county					99999
066	000	2		999	Washburn	129	6	0000		

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
50						Wisconsin	55				
	067	182	1			Washington		131	4	5080	
				017	6	Germantown village					28875
				035	1	Milwaukee, part					53000
				059	6	West Bend					85350
				999	9	Balance of county					99999
	068	182	1			Waukesha		133	2	5080	
				006	5	Brookfield					10025
				031	5	Menomonee Falls village					51000
				035	1	Milwaukee, part					53000
				037	6	Muskego					55275
				039	5	New Berlin					56375
				041	6	Oconomowoc					59250
				055	4	Waukesha					84250
				999	9	Balance of county					99999
	069	000	2	999	9	Waupaca		135	5	0000	
	070	000	2	999	9	Waushara		137	6	0000	
	071	013	1			Winnebago		139	3	0460	
				002	4	Appleton, part					02375
				030	6	Menasha, part					50825
				038	6	Neenah					55750
				043	4	Oshkosh					60500
				999	9	Balance of county					99999
	072	000	2			Wood		141	4	0000	
				029	6	Marshfield, part					49675
				062	6	Wisconsin Rapids					88200
				999	9	Balance of county					99999

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
51						Wyoming	56				
	001	000	2			Albany	001	5	0000		
				006	5	Laramie					45050
				999	9	Balance of county					99999
	002	000	2	999	9	Big Horn	003	6	0000		
	003	000	2			Campbell	005	5	0000		
				004	6	Gillette					31855
				999	9	Balance of county					99999
	004	000	2	999	9	Carbon	007	6	0000		
	005	000	2	999	9	Converse	009	6	0000		
	006	000	2	999	9	Crook	011	6	0000		
	007	000	2	999	9	Fremont	013	5	0000		
	008	000	2	999	9	Goshen	015	6	0000		
	009	000	2	999	9	Hot Springs	017	6	0000		
	010	000	2	999	9	Johnson	019	6	0000		
	011	054	1			Laramie	021	4	1580		
				002	4	Cheyenne					13900
				999	9	Balance of county					99999
	012	000	2	999	9	Lincoln	023	6	0000		
	013	046	1			Natrona	025	4	1350		
				001	5	Casper					13150
				999	9	Balance of county					99999
	014	000	2	999	9	Niobrara	027	6	0000		
	015	000	2	999	9	Park	029	6	0000		
	016	000	2	999	9	Platte	031	6	0000		
	017	000	2			Sheridan	033	6	0000		
				008	6	Sheridan					69845
				999	9	Balance of county					99999
	018	000	2	999	9	Sublette	035	6	0000		
	019	000	2			Sweetwater	037	5	0000		
				005	6	Green River					33740
				007	6	Rock Springs					67235
				999	9	Balance of county					99999
	020	000	2	999	9	Teton	039	6	0000		
	021	000	2			Uinta	041	6	0000		
				003	6	Evanston					25620
				999	9	Balance of county					99999
	022	000	2	999	9	Washakie	043	6	0000		
	023	000	2	999	9	Weston	045	6	0000		

Vital Statistics Codes							FIPS Codes				
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
52	ZZZ	ZZZ	Z	ZZZ	Z	Puerto Rico	00	000	Z	0000	
53	ZZZ	ZZZ	Z	ZZZ	Z	Virgin Islands	00	000	Z	0000	
54	ZZZ	ZZZ	Z	ZZZ	Z	Guam	00	000	Z	0000	
55	ZZZ	ZZZ	Z	ZZZ	Z	Canada	00	000	Z	0000	
56	ZZZ	ZZZ	Z	ZZZ	Z	Cuba	00	000	Z	0000	
57	ZZZ	ZZZ	Z	ZZZ	Z	Mexico	00	000	Z	0000	
59	ZZZ	ZZZ	Z	ZZZ	Z	Remainder of World	00	000	Z	0000	
61	ZZZ	ZZZ	Z	ZZZ	Z	American Samoa	00	000	Z	0000	
62	ZZZ	ZZZ	Z	ZZZ	Z	Northern Marianas	00	000	Z	0000	

Vital Statistics Geographic Code Outline for Puerto Rico, Virgin Islands, Guam, American Samoa and Northern Marianas

The following pages show in detail the geographic codes used by the Division of Vital Statistics in the processing of vital event data occurring in Puerto Rico, Virgin Islands, Guam, American Samoa or Northern Marianas. When an event occurs to a nonresident of these areas, residence data are coded only to the "State" level; each U.S. state, several western hemisphere countries or the remainder of the world are uniquely identified. Along with the Division of Vital Statistics codes, the Federal Information Processing Standards (FIPS) codes are shown for several items. Both sets of codes appear on the vital event public-use files. Codes are effective with the 1998 data year and are based on results of the 1990 Census.

To aid the user in interpreting the geographic codes, a brief explanation of the codes and of the column headings/abbreviations shown on the following pages are:

Puerto Rico:

State (St): Puerto Rico has its own unique code. In addition, several unique codes are used to identify nonresidents of Puerto Rico.

County (Cnty): Each municipio (county equivalent) is numbered alphabetically.

P/MSA: Primary metropolitan statistical areas and metropolitan statistical areas are those established by the U.S. Office of Management and Budget (OMB) using 1990 Census population counts.

M/NM: Metropolitan counties (code 1) are component counties of P/MSA's
Nonmetropolitan counties (code 2) are not part of any P/MSA.

City or Place: No city/places in Puerto Rico are identified.

Name: Puerto Rico and each municipio are listed along with their respective codes. In addition, places used to identify nonresidents of Puerto Rico are also listed along with their codes.

FIPS: For an explanation of FIPS codes, reference should be made to various National Institute of Standards and Technology (NIST) publications.

Virgin Islands:

State (St): The Virgin Islands has its own unique code. In addition, several unique codes are used to identify nonresidents of the V.I.

County (Cnty): Several Islands (county equivalent) are numbered alphabetically.

P/MSA: None are identified in the Virgin Islands.

M/NM: No metropolitan areas are identified for the Virgin Islands.

City or Place: City/places are numbered alphabetically and identify each city with a population of 10,000 or more in 1990.

P/S: Population size code for city of residence based on the 1990 Census. Refer to the code outline given earlier in this document for specific codes and meanings.

Name: The Virgin Islands as a whole and several islands are listed along with their respective codes. In addition, places used to identify nonresidents of the V.I. are also listed along with their codes.

**Vital Statistics Geographic Code Outline for Puerto Rico,
Virgin Islands, Guam, American Samoa and Northern Marianas- Con.**

Guam:

State (St): Guam has its own unique code. In addition, several unique codes are used to identify nonresidents of Guam.

County (Cnty): None are identified in Guam.

P/MSA: None are identified in Guam.

M/NM: No metropolitan areas are identified for Guam.

City or Place: None are identified in Guam.

P/S: No population size groups are identified for Guam.

Name: Guam as a whole is listed along with its respective code. In addition, places used to identify nonresidents of Guam are also listed along with their codes.

American Samoa:

State (St): American Samoa has its own unique code. In addition, several unique codes are used to identify nonresidents of American Samoa.

County (Cnty): None are identified in American Samoa.

P/MSA: None are identified in American Samoa.

M/NM: No metropolitan areas are identified for American Samoa.

City or Place: None are identified in American Samoa.

P/S: No population size groups are identified for American Samoa.

Name: American Samoa as a whole is listed along with its respective code. In addition, places used to identify nonresidents of American Samoa are also listed along with their codes.

Northern Marianas:

State (St): Northern Marianas has its own unique code. In addition, several unique codes are used to identify nonresidents of Northern Marianas

County (Cnty): None are identified in Northern Marianas.

P/MSA: None are identified in Northern Marianas.

M/NM: No metropolitan areas are identified for Northern Marianas.

City or Place: None are identified in Northern Marianas.

P/S: No population size groups are identified for Northern Marianas.

Name: Northern Marianas as a whole is listed along with its respective code. In addition, places used to identify nonresidents of Northern Marianas are also listed along with their codes.

List of Primary Metropolitan Statistical Areas
and their Component Counties
For the United States and Puerto Rico

Vital Statistics Codes					Area Names	FIPS Codes			
St	Cnty	P/MSA	M/NM	City		St	Cnty	P/MSA	Place
01	000	999	9	000	Alabama	01	000	0000	00000
02	000	999	9	000	Alaska	02	000	0000	00000
03	000	999	9	000	Arizona	04	000	0000	00000
04	000	999	9	000	Arkansas	05	000	0000	00000
05	000	999	9	000	California	06	000	0000	00000
06	000	999	9	000	Colorado	08	000	0000	00000
07	000	999	9	000	Connecticut	09	000	0000	00000
08	000	999	9	000	Delaware	10	000	0000	00000
09	000	999	9	000	District of Columbia	11	000	0000	00000
10	000	999	9	000	Florida	12	000	0000	00000
11	000	999	9	000	Georgia	13	000	0000	00000
12	000	999	9	000	Hawaii	15	000	0000	00000
13	000	999	9	000	Idaho	16	000	0000	00000
14	000	999	9	000	Illinois	17	000	0000	00000
15	000	999	9	000	Indiana	18	000	0000	00000
16	000	999	9	000	Iowa	19	000	0000	00000
17	000	999	9	000	Kansas	20	000	0000	00000
18	000	999	9	000	Kentucky	21	000	0000	00000
19	000	999	9	000	Louisiana	22	000	0000	00000
20	000	999	9	000	Maine	23	000	0000	00000
21	000	999	9	000	Maryland	24	000	0000	00000
22	000	999	9	000	Massachusetts	25	000	0000	00000
23	000	999	9	000	Michigan	26	000	0000	00000
24	000	999	9	000	Minnesota	27	000	0000	00000
25	000	999	9	000	Mississippi	28	000	0000	00000
26	000	999	9	000	Missouri	29	000	0000	00000
27	000	999	9	000	Montana	30	000	0000	00000
28	000	999	9	000	Nebraska	31	000	0000	00000
29	000	999	9	000	Nevada	32	000	0000	00000
30	000	999	9	000	New Hampshire	33	000	0000	00000
31	000	999	9	000	New Jersey	34	000	0000	00000
32	000	999	9	000	New Mexico	35	000	0000	00000
33	000	999	9	000	New York	36	000	0000	00000
34	000	999	9	000	North Carolina	37	000	0000	00000
35	000	999	9	000	North Dakota	38	000	0000	00000
36	000	999	9	000	Ohio	39	000	0000	00000

Vital Statistics Codes					Area Names	FIPS Codes			
St	Cnty	P/MSA	M/NM	City		St	Cnty	P/MSA	Place
37	000	999	9	000	Oklahoma	40	000	0000	00000
38	000	999	9	000	Oregon	41	000	0000	00000
39	000	999	9	000	Pennsylvania	42	000	0000	00000
40	000	999	9	000	Rhode Island	44	000	0000	00000
41	000	999	9	000	South Carolina	45	000	0000	00000
42	000	999	9	000	South Dakota	46	000	0000	00000
43	000	999	9	000	Tennessee	47	000	0000	00000
44	000	999	9	000	Texas	48	000	0000	00000
45	000	999	9	000	Utah	49	000	0000	00000
46	000	999	9	000	Vermont	50	000	0000	00000
47	000	999	9	000	Virginia	51	000	0000	00000
48	000	999	9	000	Washington	53	000	0000	00000
49	000	999	9	000	West Virginia	54	000	0000	00000
50	000	999	9	000	Wisconsin	55	000	0000	00000
51	000	999	9	000	Wyoming	56	000	0000	00000

Vital Statistics Codes				Area Names	FIPS Codes		
St Cnty	P/MSA	M/NM	City		St Cnty	P/MSA	Place
52				Puerto Rico	72		
	001	000	2	999		001	0000
	002	001	1	999		003	0060
	003	001	1	999		005	0060
	004	006	1	999		007	7440
	005	000	2	999		009	0000
	006	004	1	999		011	4840
	007	002	1	999		013	0470
	008	000	2	999		015	0000
	009	006	1	999		017	7440
	010	000	2	999		019	0000
	011	006	1	999		021	7440
	012	004	1	999		023	4840
	013	003	1	999		025	1310
	014	002	1	999		027	0470
	015	006	1	999		029	7440
	016	006	1	999		031	7440
	017	006	1	999		033	7440
	018	003	1	999		035	1310
	019	006	1	999		037	7440
	020	000	2	999		039	0000
	021	003	1	999		041	1310
	022	000	2	999		043	0000
	023	006	1	999		045	7440
	024	006	1	999		047	7440
	025	000	2	999		049	0000
	026	006	1	999		051	7440
	027	006	1	999		053	7440
	028	006	1	999		054	7440
	029	000	2	999		055	0000
	030	000	2	999		057	0000
	031	005	1	999		059	6360
	032	006	1	999		061	7440
	033	003	1	999		063	1310
	034	002	1	999		065	0470
	035	004	1	999		067	4840
	036	006	1	999		069	7440
	037	000	2	999		071	0000
	038	000	2	999		073	0000
	039	005	1	999		075	6360
	040	006	1	999		077	7440
	041	000	2	999		079	0000
	042	000	2	999		081	0000
	043	000	2	999		083	0000
	044	006	1	999		085	7440
	045	006	1	999		087	7440
	046	006	1	999		089	7440
	047	006	1	999		091	7440
	048	000	2	999		093	0000
	049	000	2	999		095	0000
	050	004	1	999		097	4840
	051	001	1	999		099	0060
	052	006	1	999		101	7440
	053	006	1	999		103	7440
	054	006	1	999		105	7440
	055	000	2	999		107	0000
	056	000	2	999		109	0000
	057	005	1	999		111	6360
	058	005	1	999		113	6360
	059	000	2	999		115	0000
	060	000	2	999		117	0000
	061	006	1	999		119	7440
	062	004	1	999		121	4840
	063	000	2	999		123	0000
	064	004	1	999		125	4840
	065	006	1	999		127	7440
	066	003	1	999		129	1310
	067	000	2	999		131	0000
	068	000	2	999		133	0000
	069	006	1	999		135	7440
	070	006	1	999		137	7440
	071	006	1	999		139	7440
	072	000	2	999		141	0000
	073	006	1	999		143	7440
	074	006	1	999		145	7440

Vital Statistics Codes					Area Names	FIPS Codes			
St	Cnty	P/MSA	M/NM	City		St	Cnty	P/MSA	Place
52					Puerto Rico	72			
	075	000	2	999	Vieques		147	0000	
	076	005	1	999	Villalba		149	6360	
	077	006	1	999	Yabucoa		151	7440	
	078	005	1	999	Yauco		153	6360	
53					Virgin Islands	78			
	001	000	2	999	St. Croix		010	0000	
	002	000	2	999	St. John		020	0000	
	003	000	2		St. Thomas		030	0000	
				001	Charlotte Amalie				99999
				999	Balance of area				99999
54					Guam	66			
	000	000	2		Guam		010	0000	
				000	Guam				99999
55	ZZZ	ZZZ	Z	ZZZ	Canada	00	000	0000	00000
56	ZZZ	ZZZ	Z	ZZZ	Cuba	00	000	0000	00000
57	ZZZ	ZZZ	Z	ZZZ	Mexico	00	000	0000	00000
59	ZZZ	ZZZ	Z	ZZZ	Remainder of World	00	000	0000	00000
61					American Samoa	60			
	000	000	2		American Samoa		000	0000	
				000	American Samoa				99999
62					Northern Marianas	69			
	000	000	2		Northern Marianas		000	0000	
				000	Northern Marianas				99999

List of Primary Metropolitan Statistical Areas
and their Component Counties
For the United States and Puerto Rico

United States
Puerto Rico

Vital Statistics Codes					FIPS Codes	
P/MSA	State	County	P/MSA Name and County Components	P/MSA	State	Cnty
001	44		Abilene, TX, MSA	0040		
		221	Texas Taylor		48	441
002	36		Akron, OH, PMSA	0080		
		067	Ohio Portage		39	133
		077	Summit			153
003	11		Albany, GA, MSA	0120		
		047	Georgia Dougherty		13	095
		088	Lee			177
004	33		Albany-Schenectady-Troy, NY, MSA	0160		
			New York		36	
		001	Albany			001
		027	Montgomery			057
		039	Rensselaer			083
		042	Saratoga			091
		043	Schenectady			093
		044	Schoharie			095
005	32		Albuquerque, NM, MSA	0200		
			New Mexico		35	
		001	Bernalillo			001
		024	Sandoval			043
		033	Valencia			061
006	19		Alexandria, LA, MSA	0220		
			Louisiana		22	
		040	Rapides			079
007	39		Allentown-Bethlehem-Easton, PA, MSA	0240		
			Pennsylvania		42	
		013	Carbon			025
		039	Lehigh			077
		048	Northampton			095
008	39		Altoona, PA, MSA	0280		
			Pennsylvania		42	
		007	Blair			013
009	44		Amarillo, TX, MSA	0320		
			Texas		48	
		188	Potter			375
		191	Randall			381
010	02		Anchorage, AK, MSA	0380		
			Alaska		02	
		003	Anchorage			020
011	23		Ann Arbor, MI, PMSA	0440		
			Michigan		26	
		046	Lenawee			091
		047	Livingston			093
		081	Washtenaw			161
012	01		Anniston, AL, MSA	0450		
			Alabama		01	
		008	Calhoun			015
013	50		Appleton-Oshkosh-Neenah, WI, MSA	0460		
			Wisconsin		55	
		008	Calumet			015
		045	Outagamie			087
		071	Winnebago			139
014	34		Asheville, NC, MSA	0480		
			North Carolina		37	
		011	Buncombe			021
		058	Madison			115

United States
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Vital Statistics Codes					FIPS Codes	
P/MSA	State	County	P/MSA Name and County Components	P/MSA	State	Cnty
015	11		Athens, GA, MSA	0500	13	
		029	Georgia			059
		097	Clarke			195
		108	Madison			219
			Oconee			
016	11		Atlanta, GA, MSA	0520	13	
		007	Georgia			013
		008	Barrow			015
		022	Bartow			045
		028	Carroll			057
		031	Cherokee			063
		033	Clayton			067
		038	Cobb			077
		044	Coweta			089
		048	De Kalb			097
		056	Douglas			113
		058	Fayette			117
		060	Forsyth			121
		067	Fulton			135
		075	Gwinnett			151
		107	Henry			217
		110	Newton			223
		112	Paulding			227
		122	Pickens			247
		126	Rockdale			255
		147	Spalding			297
			Walton			
017	31		Atlantic-Cape May, NJ, PMSA	0560	34	
		001	New Jersey			001
		005	Atlantic			009
			Cape May			
018	11		Augusta-Aiken, GA-SC, MSA	0600	13	
		036	Georgia			073
		094	Columbia			189
		121	McDuffie			245
	41		South Carolina		45	
		002	Aiken			003
		019	Edgefield			037
019	44		Austin-San Marcos, TX, MSA	0640	48	
		011	Texas			021
		028	Bastrop			055
		105	Caldwell			209
		227	Hays			453
		246	Travis			491
			Williamson			
020	05		Bakersfield, CA, MSA	0680	06	
		015	California			029
			Kern			
021	21		Baltimore, MD, PMSA	0720	24	
		002	Maryland			003
		003	Anne Arundel			005
		004	Baltimore			510
		007	Baltimore city			013
		013	Carroll			025
		014	Harford			027
		018	Howard			035
			Queen Anne's			
022	20		Bangor, ME, NECMA	0733	23	
		010	Maine			019
			Penobscot			
023	22		Barnstable-Yarmouth, MA, NECMA	0743	25	
		001	Massachusetts			001
			Barnstable			

United States
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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
024	19		Baton Rouge, LA, MSA	0760		
			Louisiana		22	
		003	Ascension			005
		017	East Baton Rouge			033
		032	Livingston			063
		061	West Baton Rouge			121
025	44		Beaumont-Port Arthur, TX, MSA	0840		
			Texas		48	
		100	Hardin			199
		123	Jefferson			245
		181	Orange			361
026	48		Bellingham, WA, MSA	0860		
			Washington		53	
		037	Whatcom			073
027	23		Benton Harbor, MI, MSA	0870		
			Michigan		26	
		011	Berrien			021
028	31		Bergen-Passaic, NJ, PMSA	0875		
			New Jersey		34	
		002	Bergen			003
		016	Passaic			031
029	27		Billings, MT, MSA	0880		
			Montana		30	
		056	Yellowstone			111
030	25		Biloxi-Gulfport-Pascagoula, MS, MSA	0920		
			Mississippi		28	
		023	Hancock			045
		024	Harrison			047
		030	Jackson			059
031	33		Binghamton, NY, MSA	0960		
			New York		36	
		003	Broome			007
		050	Tioga			107
032	01		Birmingham, AL, MSA	1000		
			Alabama		01	
		005	Blount			009
		037	Jefferson			073
		058	St. Clair			115
		059	Shelby			117
033	35		Bismarck, ND, MSA	1010		
			North Dakota		38	
		008	Burleigh			015
		030	Morton			059
034	15		Bloomington, IN, MSA	1020		
			Indiana		18	
		053	Monroe			105
035	14		Bloomington-Normal, IL, MSA	1040		
			Illinois		17	
		057	McLean			113
036	13		Boise City, ID, MSA	1080		
			Idaho		16	
		001	Ada			001
		014	Canyon			027

United States
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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
037	22		Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH Massachusetts	1123	25	
		003	Bristol			005
		005	Essex			009
		009	Middlesex			017
		011	Norfolk			021
		012	Plymouth			023
		013	Suffolk			025
		014	Worcester			027
	30		New Hampshire		33	
		006	Hillsborough			011
		008	Rockingham			015
		009	Strafford			017
038	06		Boulder-Longmont, CO, PMSA Colorado	1125	08	
		007	Boulder			013
039	44		Brazoria, TX, PMSA Texas	1145	48	
		020	Brazoria			039
040	48		Bremerton, WA, PMSA Washington	1150	53	
		018	Kitsap			035
041	44		Brownsville-Harlingen-San Benito, TX, MSA Texas	1240	48	
		031	Cameron			061
042	44		Bryan-College Station, TX, MSA Texas	1260	48	
		021	Brazos			041
043	33		Buffalo-Niagara Falls, NY, MSA New York	1280	36	
		014	Erie			029
		030	Niagara			063
044	46		Burlington, VT, NECMA Vermont	1303	50	
		004	Chittenden			007
		006	Franklin			011
		007	Grand Isle			013
045	36		Canton-Massillon, OH, MSA Ohio	1320	39	
		010	Carroll			019
		076	Stark			151
046	51		Casper, WY, MSA Wyoming	1350	56	
		013	Natrona			025
047	16		Cedar Rapids, IA, MSA Iowa	1360	19	
		057	Linn			113
048	14		Champaign-Urbana, IL, MSA Illinois	1400	17	
		010	Champaign			019
049	41		Charleston-North Charleston, SC, MSA South Carolina	1440	45	
		008	Berkeley			015
		010	Charleston			019
		018	Dorchester			035
050	49		Charleston, WV, MSA West Virginia	1480	54	
		020	Kanawha			039
		040	Putnam			079

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
051	34		Charlotte-Gastonia-Rock Hill, NC-SC, MSA	1520		
			North Carolina		37	
		013	Cabarrus			025
		036	Gaston			071
		055	Lincoln			109
		060	Mecklenburg			119
		080	Rowan			159
		090	Union			179
	41		South Carolina		45	
		046	York			091
052	47		Charlottesville, VA, MSA	1540		
			Virginia		51	
		002	Albemarle			003
		025	Charlottesville city			540
		045	Fluvanna			065
		055	Greene			079
053	11		Chattanooga, TN-GA, MSA	1560		
			Georgia		13	
		023	Catoosa			047
		041	Dade			083
		146	Walker			295
	43		Tennessee		47	
		033	Hamilton			065
		058	Marion			115
054	51		Cheyenne, WY, MSA	1580		
			Wyoming		56	
		011	Laramie			021
055	14		Chicago, IL, PMSA	1600		
			Illinois		17	
		016	Cook			031
		019	De Kalb			037
		022	Du Page			043
		032	Grundy			063
		045	Kane			089
		047	Kendall			093
		049	Lake			097
		056	McHenry			111
		099	Will			197
056	05		Chico-Paradise, CA, MSA	1620		
			California		06	
		004	Butte			007
057	15		Cincinnati, OH-KY-IN, PMSA	1640		
			Indiana		18	
		015	Dearborn			029
		058	Ohio			115
	18		Kentucky		21	
		008	Boone			015
		019	Campbell			037
		039	Gallatin			077
		041	Grant			081
		059	Kenton			117
		096	Pendleton			191
	36		Ohio		39	
		008	Brown			015
		013	Clermont			025
		031	Hamilton			061
		083	Warren			165
058	18		Clarksville-Hopkinsville, TN-KY, MSA	1660		
			Kentucky		21	
		024	Christian			047
	43		Tennessee		47	
		063	Montgomery			125

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Vital Statistics Codes					FIPS	Codes	
P/MSA	State	County	P/MSA	Name and County Components	P/MSA	State	Cnty
059	36			Cleveland-Lorain-Elyria, OH, PMSA	1680		
				Ohio		39	
		004		Ashtabula			007
		018		Cuyahoga			035
		028		Geauga			055
		043		Lake			085
		047		Lorain			093
		052		Medina			103
060	06			Colorado Springs, CO, MSA	1720		
				Colorado		08	
		021		El Paso			041
061	26			Columbia, MO, MSA	1740		
				Missouri		29	
		010		Boone			019
062	41			Columbia, SC, MSA	1760		
				South Carolina		45	
		032		Lexington			063
		040		Richland			079
063	01			Columbus, GA-AL, MSA	1800		
				Alabama		01	
		057		Russell			113
				Georgia		13	
		026		Chattahoochee			053
		072		Harris			145
		106		Muscogee			215
064	36			Columbus, OH, MSA	1840		
				Ohio		39	
		021		Delaware			041
		023		Fairfield			045
		025		Franklin			049
		045		Licking			089
		049		Madison			097
		065		Pickaway			129
065	44			Corpus Christi, TX, MSA	1880		
				Texas		48	
		178		Nueces			355
		205		San Patricio			409
066	21			Cumberland, MD-WV, MSA	1900		
				Maryland		24	
		001		Allegany			001
		49		West Virginia		54	
		029		Mineral			057
067	44			Dallas, TX, PMSA	1920		
				Texas		48	
		043		Collin			085
		057		Dallas			113
		061		Denton			121
		070		Ellis			139
		107		Henderson			213
		116		Hunt			231
		129		Kaufman			257
		199		Rockwall			397
068	47			Danville, VA, MSA	1950		
				Virginia		51	
		035		Danville city			590
		097		Pittsylvania			143
069	14			Davenport-Moline-Rock Island, IA-IL, MSA	1960		
				Illinois		17	
		037		Henry			073
		081		Rock Island			161
	16			Iowa		19	
		082		Scott			163

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Vital Statistics Codes			P/MSA Name and County Components	FIPS P/MSA	Codes	
P/MSA	State	County			State	Cnty
070	36		Dayton-Springfield, OH, MSA	2000	39	
		012	Ohio			
		029	Clark			023
		055	Greene			057
		057	Miami			109
			Montgomery			113
071	10		Daytona Beach, FL, MSA	2020	12	
		018	Florida			
		064	Flagler			035
			Volusia			127
072	01		Decatur, AL, MSA	2030	01	
		040	Alabama			
		052	Lawrence			079
			Morgan			103
073	14		Decatur, IL, MSA	2040	17	
		058	Illinois			
			Macon			115
074	06		Denver, CO, PMSA	2080	08	
		001	Colorado			
		003	Adams			001
		016	Arapahoe			005
		018	Denver			031
		030	Douglas			035
			Jefferson			059
075	16		Des Moines, IA, MSA	2120	19	
		025	Iowa			
		077	Dallas			049
		091	Polk			153
			Warren			181
076	23		Detroit, MI, PMSA	2160	26	
		044	Michigan			
		050	Lapeer			087
		058	Macomb			099
		063	Monroe			115
		074	Oakland			125
		082	St. Clair			147
			Wayne			163
077	01		Dothan, AL, MSA	2180	01	
		023	Alabama			
		035	Dale			045
			Houston			069
078	08		Dover, DE, MSA	2190	10	
		001	Delaware			
			Kent			001
079	16		Dubuque, IA, MSA	2200	19	
		031	Iowa			
			Dubuque			061
080	24		Duluth-Superior, MN-WI, MSA	2240	27	
		069	Minnesota			
		50	St. Louis			137
		016	Wisconsin			55
			Douglas			031
081	33		Dutchess County, NY, PMSA	2281	36	
		013	New York			
			Dutchess			027
082	50		Eau Claire, WI, MSA	2290	55	
		009	Wisconsin			
		018	Chippewa			017
			Eau Claire			035

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Vital Statistics Codes P/MSA	State	County	P/MSA Name and County Components	FIPS P/MSA	Codes	
					State	Cnty
083	44	071	El Paso, TX, MSA Texas El Paso	2320	48	141
084	15	020	Elkhart-Goshen, IN, MSA Indiana Elkhart	2330	18	039
085	33	007	Elmira, NY, MSA New York Chemung	2335	36	015
086	37	024	Enid, OK, MSA Oklahoma Garfield	2340	40	047
087	39	025	Erie, PA, MSA Pennsylvania Erie	2360	42	049
088	38	020	Eugene-Springfield, OR, MSA Oregon Lane	2400	41	039
089	15	065	Evansville-Henderson, IN-KY, MSA Indiana Posey	2440	18	129
		082	Vanderburgh			163
	18	087	Warrick			173
		051	Kentucky Henderson		21	101
090	24	014	Fargo-Moorhead, ND-MN, MSA Minnesota Clay	2520	27	027
	35	009	North Dakota Cass		38	017
091	34	026	Fayetteville, NC, MSA North Carolina Cumberland	2560	37	051
092	04	004	Fayetteville-Springdale-Rogers, AR, MSA Arkansas Benton	2580	05	007
		072	Washington			143
093	23	025	Flint, MI, PMSA Michigan Genesee	2640	26	049
094	01	017	Florence, AL, MSA Alabama Colbert	2650	01	033
		039	Lauderdale			077
095	41	021	Florence, SC, MSA South Carolina Florence	2655	45	041
096	06	035	Fort Collins-Loveland, CO, MSA Colorado Larimer	2670	08	069
097	10	006	Fort Lauderdale, FL, PMSA Florida Broward	2680	12	011
098	10	036	Fort Myers-Cape Coral, FL, MSA Florida Lee	2700	12	071

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
099	10		Fort Pierce-Port St. Lucie, FL, MSA	2710		
		043	Florida		12	
		056	Martin			085
			St. Lucie			111
100	04		Fort Smith, AR-OK, MSA	2720		
		017	Arkansas		05	
		066	Crawford			033
			Sebastian			131
	37		Oklahoma		40	
		068	Sequoyah			135
101	10		Fort Walton Beach, FL, MSA	2750		
		046	Florida		12	
			Okaloosa			091
102	15		Fort Wayne, IN, MSA	2760		
		001	Indiana		18	
		002	Adams			001
		017	Allen			003
		035	De Kalb			033
		090	Huntington			069
		092	Wells			179
			Whitley			183
103	44		Fort Worth-Arlington, TX, PMSA	2800		
		111	Texas		48	
		126	Hood			221
		184	Johnson			251
		220	Parker			367
			Tarrant			439
104	05		Fresno, CA, MSA	2840		
		010	California		06	
		020	Fresno			019
			Madera			039
105	01		Gadsden, AL, MSA	2880		
		028	Alabama		01	
			Etowah			055
106	10		Gainesville, FL, MSA	2900		
		001	Florida		12	
			Alachua			001
107	44		Galveston-Texas City, TX, PMSA	2920		
		084	Texas		48	
			Galveston			167
108	15		Gary, IN, PMSA	2960		
		045	Indiana		18	
		064	Lake			089
			Porter			127
109	33		Glens Falls, NY, MSA	2975		
		053	New York		36	
		054	Warren			113
			Washington			115
110	34		Goldsboro, NC, MSA	2980		
		096	North Carolina		37	
			Wayne			191
111	24		Grand Forks, ND-MN, MSA	2985		
		060	Minnesota		27	
			Polk			119
	35		North Dakota		38	
		018	Grand Forks			035

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
112	23		Grand Rapids-Muskegon-Holland, MI, MSA	3000	26	
		003	Michigan			005
		041	Allegan			081
		061	Kent			121
		070	Muskegon			139
			Ottawa			
113	27		Great Falls, MT, MSA	3040	30	
		007	Montana			013
			Cascade			
114	06		Greeley, CO, PMSA	3060	08	
		062	Colorado			123
			Weld			
115	50		Green Bay, WI, MSA	3080	55	
		005	Wisconsin			009
			Brown			
116	34		Greensboro--Winston-Salem--High Point, NC, MSA	3120	37	
		001	North Carolina			001
		029	Alamance			057
		030	Davidson			059
		034	Davie			067
		041	Forsyth			081
		076	Guilford			151
		085	Randolph			169
		099	Stokes			197
			Yadkin			
117	34		Greenville, NC, MSA	3150	37	
		074	North Carolina			147
			Pitt			
118	41		Greenville-Spartanburg-Anderson, SC, MSA	3160	45	
		004	South Carolina			007
		011	Anderson			021
		023	Cherokee			045
		039	Greenville			077
		042	Pickens			083
			Spartanburg			
119	21		Hagerstown, MD, PMSA	3180	24	
		022	Maryland			043
			Washington			
120	36		Hamilton-Middletown, OH, PMSA	3200	39	
		009	Ohio			017
			Butler			
121	39		Harrisburg-Lebanon-Carlisle, PA, MSA	3240	42	
		021	Pennsylvania			041
		022	Cumberland			043
		038	Dauphin			075
		050	Lebanon			099
			Perry			
122	07		Hartford, CT, NECMA	3283	09	
		002	Connecticut			003
		004	Hartford			007
		007	Middlesex			013
			Tolland			
123	25		Hattiesburg, MS, MSA	3285	28	
		018	Mississippi			035
		037	Forrest			073
			Lamar			
124	34		Hickory-Morganton, NC, MSA	3290	37	
		002	North Carolina			003
		012	Alexander			023
		014	Burke			027
		018	Caldwell			035
			Catawba			

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Vital Statistics P/MSA	Codes		P/MSA Name and County Components	FIPS P/MSA	Codes	
	State	County			State	Cnty
125	12		Honolulu, HI, MSA	3320		
		002	Hawaii Honolulu		15	003
126	19		Houma, LA, MSA	3350		
		029	Louisiana		22	057
		055	Lafourche Terrebonne			109
127	44		Houston, TX, PMSA	3360		
			Texas		48	
		036	Chambers			071
		079	Fort Bend			157
		101	Harris			201
		146	Liberty			291
		170	Montgomery			339
		237	Waller			473
128	18		Huntington-Ashland, WV-KY-OH, MSA	3400		
			Kentucky		21	
		010	Boyd			019
		022	Carter			043
		045	Greenup			089
	36		Ohio		39	
		044	Lawrence			087
	49		West Virginia		54	
		006	Cabell			011
		050	Wayne			099
129	01		Huntsville, AL, MSA	3440		
			Alabama		01	
		042	Limestone			083
		045	Madison			089
130	15		Indianapolis, IN, MSA	3480		
			Indiana		18	
		006	Boone			011
		029	Hamilton			057
		030	Hancock			059
		032	Hendricks			063
		041	Johnson			081
		048	Madison			095
		049	Marion			097
		055	Morgan			109
		073	Shelby			145
131	16		Iowa City, IA, MSA	3500		
			Iowa		19	
		052	Johnson			103
132	23		Jackson, MI, MSA	3520		
			Michigan		26	
		038	Jackson			075
133	25		Jackson, MS, MSA	3560		
			Mississippi		28	
		025	Hinds			049
		045	Madison			089
		061	Rankin			121
134	43		Jackson, TN, MSA	3580		
			Tennessee		47	
		057	Madison			113
135	10		Jacksonville, FL, MSA	3600		
			Florida		12	
		010	Clay			019
		016	Duval			031
		045	Nassau			089
		055	St. Johns			109
136	34		Jacksonville, NC, MSA	3605		
			North Carolina		37	
		067	Onslow			133

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
137	33		Jamestown, NY, MSA	3610		
		006	New York Chautauqua		36	013
138	50		Janesville-Beloit, WI, MSA	3620		
		054	Wisconsin Rock		55	105
139	31		Jersey City, NJ, PMSA	3640		
		009	New Jersey Hudson		34	017
140	43		Johnson City-Kingsport-Bristol, TN-VA, MSA	3660		
		010	Tennessee Carter		47	019
		037	Hawkins			073
		082	Sullivan			163
		086	Unicoi			171
		090	Washington			179
	47		Virginia		51	
		015	Bristol city			520
		115	Scott			169
		129	Washington			191
141	39		Johnstown, PA, MSA	3680		
		011	Pennsylvania Cambria		42	021
		056	Somerset			111
142	26		Joplin, MO, MSA	3710		
		049	Missouri Jasper		29	097
		073	Newton			145
143	23		Kalamazoo-Battle Creek, MI, MSA	3720		
		013	Michigan Calhoun		26	025
		039	Kalamazoo			077
		080	Van Buren			159
144	14		Kankakee, IL, PMSA	3740		
		046	Illinois Kankakee		17	091
145	17		Kansas City, MO-KS, MSA	3760		
		046	Kansas Johnson		20	091
		052	Leavenworth			103
		061	Miami			121
		105	Wyandotte			209
	26		Missouri		29	
		019	Cass			037
		024	Clay			047
		025	Clinton			049
		048	Jackson			095
		054	Lafayette			107
		083	Platte			165
		089	Ray			177
146	50		Kenosha, WI, PMSA	3800		
		030	Wisconsin Kenosha		55	059
147	44		Killeen-Temple, TX, MSA	3810		
		014	Texas Bell		48	027
		050	Coryell			099

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Vital Statistics Codes			P/MSA Name and County Components	FIPS P/MSA	Codes	
P/MSA	State	County			State	Cnty
148	43		Knoxville, TN, MSA	3840	47	
		001	Tennessee			001
		005	Anderson			009
		047	Blount			093
		053	Knox			105
		078	Loudon			155
		087	Sevier			173
		087	Union			
149	15		Kokomo, IN, MSA	3850	18	
		034	Indiana			067
		080	Howard			159
		080	Tipton			
150	24		La Crosse, WI-MN, MSA	3870	27	
		028	Minnesota			055
	50		Houston		55	
		032	Wisconsin			063
		032	La Crosse			
151	19		Lafayette, LA, MSA	3880	22	
		001	Louisiana			001
		028	Acadia			055
		049	Lafayette			097
		050	St. Landry			099
		050	St. Martin			
152	15		Lafayette, IN, MSA	3920	18	
		012	Indiana			023
		079	Clinton			157
		079	Tippecanoe			
153	19		Lake Charles, LA, MSA	3960	22	
		010	Louisiana			019
		010	Calcasieu			
154	10		Lakeland-Winter Haven, FL, MSA	3980	12	
		053	Florida			105
		053	Polk			
155	39		Lancaster, PA, MSA	4000	42	
		036	Pennsylvania			071
		036	Lancaster			
156	23		Lansing-East Lansing, MI, MSA	4040	26	
		019	Michigan			037
		023	Clinton			045
		033	Eaton			065
		033	Ingham			
157	44		Laredo, TX, MSA	4080	48	
		240	Texas			479
		240	Webb			
158	32		Las Cruces, NM, MSA	4100	35	
		008	New Mexico			013
		008	Dona Ana			
159	03		Las Vegas, NV-AZ, MSA	4120	04	
		009	Arizona			015
	29		Mohave		32	
		003	Nevada			003
		013	Clark			023
		013	Nye			
160	17		Lawrence, KS, MSA	4150	20	
		023	Kansas			045
		023	Douglas			
161	37		Lawton, OK, MSA	4200	40	
		016	Oklahoma			031
		016	Comanche			

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Vital Statistics Codes			P/MSA Name and County Components	FIPS P/MSA	Codes	
P/MSA	State	County			State	Cnty
162	20	001	Lewiston-Auburn, ME, NECMA Maine Androscoggin	4243	23	001
163	18	009 025 034 057 076 105 120	Lexington, KY, MSA Kentucky Bourbon Clark Fayette Jessamine Madison Scott Woodford	4280	21	017 049 067 113 151 209 239
164	36	002 006	Lima, OH, MSA Ohio Allen Auglaize	4320	39	003 011
165	28	055	Lincoln, NE, MSA Nebraska Lancaster	4360	31	109
166	04	023 043 060 063	Little Rock-North Little Rock, AR, MSA Arkansas Faulkner Lonoke Pulaski Saline	4400	05	045 085 119 125
167	44	092 102 230	Longview-Marshall, TX, MSA Texas Gregg Harrison Upshur	4420	48	183 203 459
168	05	019	Los Angeles-Long Beach, CA, PMSA California Los Angeles	4480	06	037
169	15	010 022 031 072	Louisville, KY-IN, MSA Indiana Clark Floyd Harrison Scott	4520	18	019 043 061 143
	18	015 056 093	Kentucky Bullitt Jefferson Oldham		21	029 111 185
170	44	152	Lubbock, TX, MSA Texas Lubbock	4600	48	303
171	47	006 011 012 020 076	Lynchburg, VA, MSA Virginia Amherst Bedford Bedford city Campbell Lynchburg city	4640	51	009 019 515 031 680
172	11	011 076 084 111 143	Macon, GA, MSA Georgia Bibb Houston Jones Peach Twiggs	4680	13	021 153 169 225 289
173	50	013	Madison, WI, MSA Wisconsin Dane	4720	55	025

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Vital Statistics Codes			P/MSA Name and County Components	FIPS P/MSA	Codes	
P/MSA	State	County			State	Cnty
174	36		Mansfield, OH, MSA	4800		
		017	Ohio		39	
		070	Crawford			033
			Richland			139
175	44		McAllen-Edinburg-Mission, TX, MSA	4880		
		108	Texas		48	
			Hidalgo			215
176	38		Medford-Ashland, OR, MSA	4890		
		015	Oregon		41	
			Jackson			029
177	10		Melbourne-Titusville-Palm Bay, FL, MSA	4900		
		005	Florida		12	
			Brevard			009
178	04		Memphis, TN-AR-MS, MSA	4920		
		018	Arkansas		05	
		25	Crittenden		28	035
		017	Mississippi			
			De Soto			033
		43	Tennessee		47	
		024	Fayette			047
		079	Shelby			157
		084	Tipton			167
179	05		Merced, CA, MSA	4940		
		024	California		06	
			Merced			047
180	10		Miami, FL, PMSA	5000		
		013	Florida		12	
			Dade			025
181	31		Middlesex-Somerset-Hunterdon, NJ, PMSA	5015		
		010	New Jersey		34	
		012	Hunterdon			019
		018	Middlesex			023
			Somerset			035
182	50		Milwaukee-Waukesha, WI, PMSA	5080		
		041	Wisconsin		55	
		046	Milwaukee			079
		067	Ozaukee			089
		068	Washington			131
			Waukesha			133
183	24		Minneapolis-St. Paul, MN-WI, MSA	5120		
		002	Minnesota		27	
		010	Anoka			003
		013	Carver			019
		019	Chisago			025
		027	Dakota			037
		030	Hennepin			053
		062	Isanti			059
		070	Ramsey			123
		071	Scott			139
		082	Sherburne			141
		086	Washington			163
			Wright			171
	50		Wisconsin		55	
		048	Pierce			093
		056	St. Croix			109
184	01		Mobile, AL, MSA	5160		
		002	Alabama		01	
		049	Baldwin			003
			Mobile			097
185	05		Modesto, CA, MSA	5170		
		050	California		06	
			Stanislaus			099

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
186	31		Monmouth-Ocean, NJ, PMSA	5190	34	
		013	New Jersey			025
		015	Monmouth			029
			Ocean			
187	19		Monroe, LA, MSA	5200	22	
		037	Louisiana			073
			Ouachita			
188	01		Montgomery, AL, MSA	5240	01	
		001	Alabama			001
		026	Autauga			051
		051	Elmore			101
			Montgomery			
189	15		Muncie, IN, MSA	5280	18	
		018	Indiana			035
			Delaware			
190	41		Myrtle Beach, SC, MSA	5330	45	
		026	South Carolina			051
			Horry			
191	10		Naples, FL, MSA	5345	12	
		011	Florida			021
			Collier			
192	43		Nashville, TN, MSA	5360	47	
		011	Tennessee			021
		019	Cheatham			037
		022	Davidson			043
		074	Dickson			147
		075	Robertson			149
		083	Rutherford			165
		094	Sumner			187
		095	Williamson			189
			Wilson			
193	33		Nassau-Suffolk, NY, PMSA	5380	36	
		028	New York			059
		048	Nassau			103
			Suffolk			
194	07		New Haven-Bridgeport-Stamford-Danbury-Waterbury,	5483	09	
		001	CT, NECMA			001
		005	Connecticut			009
			Fairfield			
			New Haven			
195	07		New London-Norwich, CT, NECMA	5523	09	
		006	Connecticut			011
			New London			
196	19		New Orleans, LA, MSA	5560	22	
		026	Louisiana			051
		036	Jefferson			071
		038	Orleans			075
		044	Plaquemines			087
		045	St. Bernard			089
		047	St. Charles			093
		048	St. James			095
		052	St. John the Baptist			103
			St. Tammany			
197	33		New York, NY, PMSA	5600	36	
		029	New York			005
		038	New York city			079
		040	Putnam			087
		056	Rockland			119
			Westchester			

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
198	31		Newark, NJ, PMSA	5640		
			New Jersey		34	
		007	Essex			013
		014	Morris			027
		019	Sussex			037
		020	Union			039
		021	Warren			041
199	33		Newburgh, NY-PA, PMSA	5660		
			New York		36	
		034	Orange			071
	39		Pennsylvania		42	
		052	Pike			103
200	34		Norfolk-Virginia Beach-Newport News, VA-NC, MSA	5720		
			North Carolina		37	
		027	Currituck			053
	47		Virginia		51	
		026	Chesapeake city			550
		052	Gloucester			073
		058	Hampton city			650
		065	Isle of Wight			093
		066	James City			095
		081	Mathews			115
		087	Newport News city			700
		088	Norfolk city			710
		098	Poquoson city			735
		099	Portsmouth city			740
		123	Suffolk city			800
		127	Virginia Beach city			810
		132	Williamsburg city			830
		136	York			199
201	05		Oakland, CA, PMSA	5775		
			California		06	
		001	Alameda			001
		007	Contra Costa			013
202	10		Ocala, FL, MSA	5790		
			Florida		12	
		042	Marion			083
203	44		Odessa-Midland, TX, MSA	5800		
			Texas		48	
		068	Ector			135
		165	Midland			329
204	37		Oklahoma City, OK, MSA	5880		
			Oklahoma		40	
		009	Canadian			017
		014	Cleveland			027
		042	Logan			083
		044	McClain			087
		055	Oklahoma			109
		063	Pottawatomie			125
205	48		Olympia, WA, PMSA	5910		
			Washington		53	
		034	Thurston			067
206	16		Omaha, NE-IA, MSA	5920		
			Iowa		19	
		078	Pottawattamie			155
	28		Nebraska		31	
		013	Cass			025
		028	Douglas			055
		077	Sarpy			153
		089	Washington			177
207	05		Orange County, CA, PMSA	5945		
			California		06	
		030	Orange			059

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
208	10		Orlando, FL, MSA	5960		
			Florida		12	
		035	Lake			069
		048	Orange			095
		049	Osceola			097
		059	Seminole			117
209	18		Owensboro, KY, MSA	5990		
			Kentucky		21	
		030	Daviess			059
210	10		Panama City, FL, MSA	6015		
			Florida		12	
		003	Bay			005
211	36		Parkersburg-Marietta, WV-OH, MSA	6020		
			Ohio		39	
		084	Washington			167
		49	West Virginia		54	
		054	Wood			107
212	10		Pensacola, FL, MSA	6080		
			Florida		12	
		017	Escambia			033
		057	Santa Rosa			113
213	14		Peoria-Pekin, IL, MSA	6120		
			Illinois		17	
		072	Peoria			143
		090	Tazewell			179
		102	Woodford			203
214	31		Philadelphia, PA-NJ, PMSA	6160		
			New Jersey		34	
		003	Burlington			005
		004	Camden			007
		008	Gloucester			015
		017	Salem			033
			Pennsylvania		42	
		009	Bucks			017
		015	Chester			029
		023	Delaware			045
		046	Montgomery			091
		051	Philadelphia			101
215	03		Phoenix-Mesa, AZ, MSA	6200		
			Arizona		04	
		008	Maricopa			013
		012	Pinal			021
216	04		Pine Bluff, AR, MSA	6240		
			Arkansas		05	
		035	Jefferson			069
217	39		Pittsburgh, PA, MSA	6280		
			Pennsylvania		42	
		002	Allegheny			003
		004	Beaver			007
		010	Butler			019
		026	Fayette			051
		063	Washington			125
		065	Westmoreland			129
218	22		Pittsfield, MA, NECMA	6323		
			Massachusetts		25	
		002	Berkshire			003
219	20		Portland, ME, NECMA	6403		
			Maine		23	
		003	Cumberland			005

United States
Puerto Rico

Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
220	38		Portland-Vancouver, OR-WA, PMSA	6440		
			Oregon		41	
		003	Clackamas			005
		005	Columbia			009
		026	Multnomah			051
		034	Washington			067
		036	Yamhill			071
	48		Washington		53	
		006	Clark			011
221	40		Providence-Warwick-Pawtucket, RI, NECMA	6483		
			Rhode Island		44	
		001	Bristol			001
		002	Kent			003
		004	Providence			007
		005	Washington			009
222	45		Provo-Orem, UT, MSA	6520		
			Utah		49	
		025	Utah			049
223	06		Pueblo, CO, MSA	6560		
			Colorado		08	
		051	Pueblo			101
224	10		Punta Gorda, FL, MSA	6580		
			Florida		12	
		008	Charlotte			015
225	50		Racine, WI, PMSA	6600		
			Wisconsin		55	
		052	Racine			101
226	34		Raleigh-Durham-Chapel Hill, NC, MSA	6640		
			North Carolina		37	
		019	Chatham			037
		032	Durham			063
		035	Franklin			069
		051	Johnston			101
		068	Orange			135
		092	Wake			183
227	42		Rapid City, SD, MSA	6660		
			South Dakota		46	
		051	Pennington			103
228	39		Reading, PA, MSA	6680		
			Pennsylvania		42	
		006	Berks			011
229	05		Redding, CA, MSA	6690		
			California		06	
		045	Shasta			089
230	29		Reno, NV, MSA	6720		
			Nevada		32	
		016	Washoe			031
231	48		Richland-Kennewick-Pasco, WA, MSA	6740		
			Washington		53	
		003	Benton			005
		011	Franklin			021

United States
Puerto Rico

Vital Statistics Codes					FIPS Codes	
P/MSA	State	County	P/MSA Name and County Components	P/MSA	State	Cnty
232	47		Richmond-Petersburg, VA, MSA	6760	51	
		023	Virginia			036
		027	Charles City			041
		030	Chesterfield			570
		037	Colonial Heights city			053
		053	Dinwiddie			075
		059	Goochland			085
		061	Hanover			087
		064	Henrico			670
		086	Hopewell city			127
		096	New Kent			730
		100	Petersburg city			145
		102	Powhatan			149
		108	Prince George			760
			Richmond city			
233	05		Riverside-San Bernardino, CA, PMSA	6780	06	
		033	California			065
		036	Riverside			071
			San Bernardino			
234	47		Roanoke, VA, MSA	6800	51	
		014	Virginia			023
		109	Botetourt			161
		110	Roanoke			770
		114	Roanoke city			775
			Salem city			
235	24		Rochester, MN, MSA	6820	27	
		055	Minnesota			109
			Olmsted			
236	33		Rochester, NY, MSA	6840	36	
		018	New York			037
		024	Genesee			051
		026	Livingston			055
		033	Monroe			069
		035	Ontario			073
		055	Orleans			117
			Wayne			
237	14		Rockford, IL, MSA	6880	17	
		004	Illinois			007
		071	Boone			141
		101	Ogle			201
			Winnebago			
238	34		Rocky Mount, NC, MSA	6895	37	
		033	North Carolina			065
		064	Edgecombe			127
			Nash			
239	05		Sacramento, CA, PMSA	6920	06	
		009	California			017
		031	El Dorado			061
		034	Placer			067
			Sacramento			
240	23		Saginaw-Bay City-Midland, MI, MSA	6960	26	
		009	Michigan			017
		056	Bay			111
		073	Midland			145
			Saginaw			
241	24		St. Cloud, MN, MSA	6980	27	
		005	Minnesota			009
		073	Benton			145
			Stearns			
242	26		St. Joseph, MO, MSA	7000	29	
		002	Missouri			003
		011	Andrew			021
			Buchanan			

United States
Puerto Rico

Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
243	14		St. Louis, MO-IL, MSA	7040		
			Illinois		17	
		014	Clinton			027
		042	Jersey			083
		060	Madison			119
		067	Monroe			133
		082	St. Clair			163
	26		Missouri		29	
		036	Franklin			071
		050	Jefferson			099
		057	Lincoln			113
		092	St. Charles			183
		095	St. Louis			189
		096	St. Louis city			510
		110	Warren			219
244	38		Salem, OR, PMSA	7080		
			Oregon		41	
		024	Marion			047
		027	Polk			053
245	05		Salinas, CA, MSA	7120		
			California		06	
		027	Monterey			053
246	45		Salt Lake City-Ogden, UT, MSA	7160		
			Utah		49	
		006	Davis			011
		018	Salt Lake			035
		029	Weber			057
247	44		San Angelo, TX, MSA	7200		
			Texas		48	
		226	Tom Green			451
248	44		San Antonio, TX, MSA	7240		
			Texas		48	
		015	Bexar			029
		046	Comal			091
		094	Guadalupe			187
		247	Wilson			493
249	05		San Diego, CA, MSA	7320		
			California		06	
		037	San Diego			073
250	05		San Francisco, CA, PMSA	7360		
			California		06	
		021	Marin			041
		038	San Francisco			075
		041	San Mateo			081
251	05		San Jose, CA, PMSA	7400		
			California		06	
		043	Santa Clara			085
252	05		San Luis Obispo-Atascadero-Paso Robles, CA, MSA	7460		
			California		06	
		040	San Luis Obispo			079
253	05		Santa Barbara-Santa Maria-Lompoc, CA, MSA	7480		
			California		06	
		042	Santa Barbara			083
254	05		Santa Cruz-Watsonville, CA, PMSA	7485		
			California		06	
		044	Santa Cruz			087
255	32		Santa Fe, NM, MSA	7490		
			New Mexico		35	
		016	Los Alamos			028
		027	Santa Fe			049

United States
Puerto Rico

Vital Statistics P/MSA	Codes State	County	P/MSA Name and County Components	FIPS P/MSA	Codes	
					State	Cnty
256	05	049	Santa Rosa, CA, PMSA California Sonoma	7500	06	097
257	10	041 058	Sarasota-Bradenton, FL, MSA Florida Manatee Sarasota	7510	12	081 115
258	11	015 025 051	Savannah, GA, MSA Georgia Bryan Chatham Effingham	7520	13	029 051 103
259	39	019 035 040 066	Scranton--Wilkes-Barre--Hazleton, PA, MSA Pennsylvania Columbia Lackawanna Luzerne Wyoming	7560	42	037 069 079 131
260	48	015 017 031	Seattle-Bellevue-Everett, WA, PMSA Washington Island King Snohomish	7600	53	029 033 061
261	39	043	Sharon, PA, MSA Pennsylvania Mercer	7610	42	085
262	50	060	Sheboygan, WI, MSA Wisconsin Sheboygan	7620	55	117
263	44	091	Sherman-Denison, TX, MSA Texas Grayson	7640	48	181
264	19	008 009 060	Shreveport-Bossier City, LA, MSA Louisiana Bossier Caddo Webster	7680	22	015 017 119
265	16	097 28 022	Sioux City, IA-NE, MSA Iowa Woodbury Nebraska Dakota	7720	19 31	193 043
266	42	041 049	Sioux Falls, SD, MSA South Dakota Lincoln Minnehaha	7760	46	083 099
267	15	071	South Bend, IN, MSA Indiana St. Joseph	7800	18	141
268	48	032	Spokane, WA, MSA Washington Spokane	7840	53	063
269	14	065 084	Springfield, IL, MSA Illinois Menard Sangamon	7880	17	129 167

United States
Puerto Rico

Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
270	26		Springfield, MO, MSA	7920		
			Missouri		29	
		022	Christian			043
		039	Greene			077
		113	Webster			225
271	22		Springfield, MA, NECMA	8003		
			Massachusetts		25	
		007	Hampden			013
		008	Hampshire			015
272	39		State College, PA, MSA	8050		
			Pennsylvania		42	
		014	Centre			027
273	36		Steubenville-Weirton, OH-WV, MSA	8080		
			Ohio		39	
		041	Jefferson			081
		49	West Virginia		54	
		005	Brooke			009
		015	Hancock			029
274	05		Stockton-Lodi, CA, MSA	8120		
			California		06	
		039	San Joaquin			077
275	41		Sumter, SC, MSA	8140		
			South Carolina		45	
		043	Sumter			085
276	33		Syracuse, NY, MSA	8160		
			New York		36	
		005	Cayuga			011
		025	Madison			053
		032	Onondaga			067
		036	Oswego			075
277	48		Tacoma, WA, PMSA	8200		
			Washington		53	
		027	Pierce			053
278	10		Tallahassee, FL, MSA	8240		
			Florida		12	
		020	Gadsden			039
		037	Leon			073
279	10		Tampa-St. Petersburg-Clearwater, FL, MSA	8280		
			Florida		12	
		027	Hernando			053
		029	Hillsborough			057
		051	Pasco			101
		052	Pinellas			103
280	15		Terre Haute, IN, MSA	8320		
			Indiana		18	
		011	Clay			021
		083	Vermillion			165
		084	Vigo			167
281	04		Texarkana, TX-Texarkana, AR, MSA	8360		
			Arkansas		05	
		046	Miller			091
		44	Texas		48	
		019	Bowie			037
282	36		Toledo, OH, MSA	8400		
			Ohio		39	
		026	Fulton			051
		048	Lucas			095
		087	Wood			173
283	17		Topeka, KS, MSA	8440		
			Kansas		20	
		089	Shawnee			177

United States
Puerto Rico

Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
284	31	011	Trenton, NJ, PMSA New Jersey Mercer	8480	34	021
285	03	011	Tucson, AZ, MSA Arizona Pima	8520	04	019
286	37	019 057 066 072 073	Tulsa, OK, MSA Oklahoma Creek Osage Rogers Tulsa Wagoner	8560	40	037 113 131 143 145
287	01	063	Tuscaloosa, AL, MSA Alabama Tuscaloosa	8600	01	125
288	44	212	Tyler, TX, MSA Texas Smith	8640	48	423
289	33	021 031	Utica-Rome, NY, MSA New York Herkimer Oneida	8680	36	043 065
290	05	028 048	Vallejo-Fairfield-Napa, CA, PMSA California Napa Solano	8720	06	055 095
291	05	056	Ventura, CA, PMSA California Ventura	8735	06	111
292	44	235	Victoria, TX, MSA Texas Victoria	8750	48	469
293	31	006	Vineland-Millville-Bridgeton, NJ, PMSA New Jersey Cumberland	8760	34	011
294	05	054	Visalia-Tulare-Porterville, CA, MSA California Tulare	8780	06	107
295	44	155	Waco, TX, MSA Texas McLennan	8800	48	309

United States
Puerto Rico

Vital Statistics Codes		FIPS Codes				
P/MSA	State	County	P/MSA Name and County Components	P/MSA	State	Cnty
296			Washington, DC-MD-VA-WV, PMSA	8840		
	09		Dist. of Columbia		11	
		001	District of Columbia			001
	21		Maryland		24	
		005	Calvert			009
		009	Charles			017
		011	Frederick			021
		016	Montgomery			031
		017	Prince George's			033
	47		Virginia		51	
		003	Alexandria city			510
		008	Arlington			013
		028	Clarke			043
		033	Culpeper			047
		040	Fairfax			059
		041	Fairfax city			600
		042	Falls Church city			610
		043	Fauquier			061
		049	Fredericksburg city			630
		068	King George			099
		073	Loudoun			107
		078	Manassas city			683
		079	Manassas Park city			685
		103	Prince William			153
		120	Spotsylvania			177
		121	Stafford			179
		128	Warren			187
	49		West Virginia		54	
		002	Berkeley			003
		019	Jefferson			037
297			Waterloo-Cedar Falls, IA, MSA	8920		
	16		Iowa		19	
		007	Black Hawk			013
298			Wausau, WI, MSA	8940		
	50		Wisconsin		55	
		037	Marathon			073
299			West Palm Beach-Boca Raton, FL, MSA	8960		
	10		Florida		12	
		050	Palm Beach			099
300			Wheeling, WV-OH, MSA	9000		
	36		Ohio		39	
		007	Belmont			013
	49		West Virginia		54	
		026	Marshall			051
		035	Ohio			069
301			Wichita, KS, MSA	9040		
	17		Kansas		20	
		008	Butler			015
		040	Harvey			079
		087	Sedgwick			173
302			Wichita Falls, TX, MSA	9080		
	44		Texas		48	
		005	Archer			009
		243	Wichita			485
303			Williamsport, PA, MSA	9140		
	39		Pennsylvania		42	
		041	Lycoming			081
304			Wilmington-Newark, DE-MD, PMSA	9160		
	08		Delaware		10	
		002	New Castle			003
	21		Maryland		24	
		008	Cecil			015

United States
Puerto Rico

Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
305	34		Wilmington, NC, MSA	9200	37	
		010	North Carolina			019
		065	Brunswick			129
			New Hanover			
306	48		Yakima, WA, MSA	9260	53	
		039	Washington			077
			Yakima			
307	05		Yolo, CA, PMSA	9270	06	
		057	California			113
			Yolo			
308	39		York, PA, MSA	9280	42	
		067	Pennsylvania			133
			York			
309	36		Youngstown-Warren, OH, MSA	9320	39	
		015	Ohio			029
		050	Columbiana			099
		078	Mahoning			155
			Trumbull			
310	05		Yuba City, CA, MSA	9340	06	
		051	California			101
		058	Sutter			115
			Yuba			
311	03		Yuma, AZ, MSA	9360	04	
		015	Arizona			027
			Yuma			

List of Primary Metropolitan Statistical Areas
and their Component Counties
For the United States and Puerto Rico

United States
Puerto Rico

Vital Statistics Codes					FIPS Codes
P/MSA	State	County	P/MSA Name and County Components	P/MSA	State Cnty
001	52		Aguadilla, PR, MSA Puerto Rico	0060	72
		002	Aguada		003
		003	Aguadilla		005
		051	Moca		099
002	52		Arecibo, PR, PMSA Puerto Rico	0470	72
		007	Arecibo		013
		014	Camuy		027
		034	Hatillo		065
003	52		Caguas, PR, PMSA Puerto Rico	1310	72
		013	Caguas		025
		018	Cayey		035
		021	Cidra		041
		033	Gurabo		063
		066	San Lorenzo		129
004	52		Mauaguez, PR, MSA Puerto Rico	4840	72
		006	Anasco		011
		012	Cabo Rojo		023
		035	Hormigueros		067
		050	Mayaguez		097
		062	Sabana Grande		121
		064	San German		125
005	52		Ponce, PR, MSA Puerto Rico	6360	72
		031	Guayanilla		059
		039	Juana Diaz		075
		057	Penuelas		111
		058	Ponce		113
		076	Villalba		149
		078	Yauco		153
006	52		San Juan-Bayamon, PR, PMSA Puerto Rico	7440	72
		004	Aguas Buenas		007
		009	Barceloneta		017
		011	Bayamon		021
		015	Canovanas		029
		016	Carolina		031
		017	Catano		033
		019	Ceiba		037
		023	Comerio		045
		024	Corozal		047
		026	Dorado		051
		027	Fajardo		053
		028	Florida		054
		032	Guaynabo		061
		036	Humacao		069
		040	Juncos		077
		044	Las Piedras		085
		045	Loiza		087
		046	Luquillo		089
		047	Manati		091
		052	Morovis		101
		053	Naguabo		103
		054	Naranjito		105
		061	Rio Grande		119
		065	San Juan		127
		069	Toa Alta		135
		070	Toa Baja		137
		071	Trujillo Alto		139
		073	Vega Alta		143
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TECHNICAL APPENDIX FROM

**VITAL STATISTICS OF
THE UNITED STATES**

1999

NATALITY

**U.S. DEPARTMENT OF
HEALTH AND HUMAN SERVICES**

**CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL CENTER FOR HEALTH STATISTICS**

Hyattsville, Maryland: March 2001

VITAL STATISTICS OF THE UNITED STATES: NATALITY, 1999
TECHNICAL APPENDIX

ACKNOWLEDGMENTS

The technical appendix preparation was coordinated by Melissa M. Park and Brady E. Hamilton in the Division of Vital Statistics under the general direction of Stephanie J. Ventura, Chief of the Reproductive Statistics Branch. The vital statistics computer file on which it is based were prepared by staff from the Division of Vital Statistics.

The Division of Vital Statistics, Mary Anne Freedman, Director, and James A. Weed, Deputy Director, managed the Vital Statistics Cooperative Program, through which the vital registration offices of all States, the District of Columbia, New York City, Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands provided the data to the National Center for Health Statistics. This Division also processed computer edits, designed and programmed the tabulations, reviewed the data, prepared documentation for this publication, and was responsible for receipt and processing of the basic data file. The following management staff provided overall direction: Ronald F. Chamblee, James A. Weed and Nicholas F. Pace. Important contributors were: Robert N. Anderson, Joyce Arbertha, Judy M. Barnes, Brenda L. Brown, Faye Cavalchire, Linda P. Currin, Sally C. Curtin, Celia Dickens, Thomas D. Dunn, Connie M. Gentry, Brenda A. Green, Vanetta Harrington, Christina K. Jarman, Millie B. Johnson, David W. Justice, Virginia J. Justice, Julia L. Kowaleski, Joyce A. Martin, T.J. Mathews, Jeff Maurer, Susan L. McBroom, Fay Menacker, Jaleh Mousavi, Gail Parr, Phyllis Powell-Hobgood, Seth J. Preslar, Adrienne L. Rouse, Jordan Sacks, Manju Sharma, Steve Steimel, George C. Tolson, Mary M. Trotter, Teresa M. Watkins, Faye L. Webster, Mary Whitley, Dora B. Wilkerson, James G. Williams, and Francine D. Winter.

The Division of Data Services, Phillip R. Beattie, Director, and Linda Bean, Chief of the Publications Branch were responsible for publication management and editorial review. The following management staff provided overall direction: Stephen L. Sloan and Rolfe W. Larson. Important contributors were Demarius V. Miller, Margaret Avery, and Patty Wilson.

The Office of Research and Methodology was responsible for the application of mathematical statistics methods to the development and implementation of quality assurance procedures. Important contributions in this area were made by Kenneth Harris.

The National Center for Health Statistics acknowledges the essential role of the vital registration offices of all States and territories in maintaining the system through which vital statistics data are obtained and for their cooperation in providing the information on which this publication is based.

A copy of the technical appendix may be obtained by contacting the National Center for Health Statistics, Reproductive Statistics Branch at 301-458-4111.

**VITAL STATISTICS OF THE UNITED STATES: NATALITY, 1999
TECHNICAL APPENDIX**

For a list of reports published by the National Center for Health
Statistics contact:

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Introduction

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This document provides detailed information on the variables and the quality and completeness of the data on the public-use file for 1999 births, published by the Centers for Disease Control and Prevention's National Center for Health Statistics (1). This report supplements the Technical notes of "Births: Final Data for 1999" (2) and provides a thorough discussion of the definitions, coding, quality and completeness of the 1999 birth data (1). In addition, this report is recommended for use with the public-use file for 1999 births, available on CD-ROM from the National Center for Health Statistics, and the tabulated data of "Vital Statistics of the United States, 1999, Volume I, Natality" (in preparation).

Definition of live birth

Every product of conception that gives a sign of life after birth, regardless of the length of the pregnancy, is considered a live birth. This concept is included in the definition set forth by the World Health Organization in 1950 and revised in 1988 by a working group formed by the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists (3,4,5):

Live birth is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached; each product of such a birth is considered liveborn.

This definition distinguishes in precise terms a live birth from a fetal death (see the section on fetal deaths in the Technical Appendix of volume II, *Vital Statistics of the United States*). In the interest of comparable natality statistics, both the Statistical Commission of the United Nations and the Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS) have adopted this definition (6,7).

History of birth-registration area

The national birth-registration area was proposed in 1850 and established in 1915. By 1933 all 48 States and the District of Columbia were participating in the registration system. The organized territories of Hawaii and Alaska were admitted in 1929 and 1950, respectively; data from these areas were prepared separately until they became States--Alaska in 1959 and Hawaii in 1960. Currently the birth-registration system of the United States covers the 50 States, the District of Columbia, the independent registration area of New York City, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands. However, in the statistical tabulations, "United States" refers only to the aggregate of the 50 States (including New York City) and the District of Columbia.

The original birth-registration area of 1915 consisted of 10 States and the District of Columbia. The growth of this area is indicated in table 4-1. This table also presents for each year through 1932 the estimated midyear population of the United States and of those States included in the registration system.

Because of the growth of the area for which data have been collected and tabulated, a national series of geographically comparable data before 1933 can be obtained only by estimation. Annual estimates of births were prepared by P. K. Whelpton for 1909-34 (8). These estimates include adjustments for underregistration and for States that were not part of the birth-registration area before 1933.

Sources of data

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Natality statistics

Since 1985 natality statistics for all States and the District of Columbia have been based on information from the total file of records. The information is received on electronic files of individual records processed by the States and provided to NCHS through the Vital Statistics Cooperative Program. NCHS receives these files from the registration offices of all States, the District of Columbia, and New York City. Information for Puerto Rico and the Virgin Islands is also received through the Vital Statistics Cooperative Program. Information for Guam is obtained from microfilm copies of original birth certificates and is based on the total file of records for all years. Data from American Samoa first became available in 1997. Data from the Commonwealth of the Northern Mariana Islands (referred to as Northern Marianas) first became available in 1998. Similar to data from Guam, the data are obtained from microfilm copies of original birth certificates and are based on the total file of records.

Birth statistics for years prior to 1951 and for 1955 are based on the total file of birth records. Statistics for 1951-54, 1956-66, and 1968-71 are based on 50-percent samples except for data for Guam and the Virgin Islands, which are based on all records filed. During the processing of the 1967 data the sampling rate was reduced from 50 percent to 20 percent. For details of this procedure and its consequences for the 1967 data see pages 3-9 to 3-11 in volume I of *Vital Statistics of the United States*, 1967. From 1972 to 1984 statistics are based on all records filed in the States submitting computer tapes and on a 50-percent sample of records in all other States.

Information for years prior to 1970 for Puerto Rico, the Virgin Islands, and Guam is published in the annual vital statistics reports of the Department of Health of the Commonwealth of Puerto Rico, the Department of Public Health of the Virgin Islands, the Department of Public Health and Social Services of the Government of Guam, and in selected *Vital Statistics of the United States* annual reports.

U.S. natality data are limited to births occurring within the United States, including those occurring to U.S. residents and nonresidents. Births to nonresidents of the United States have been excluded from all tabulations by place of residence beginning in 1970 (for further discussion see "Classification by occurrence and residence"). Births occurring to U.S. citizens outside the United States are not included in any tabulations in this report. Similarly the data for Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Northern Marianas are limited to births registered in these areas.

Standard certificate of live birth

The U.S. Standard Certificate of Live Birth, issued by the Public Health Service, has served for many years as the principal means of attaining uniformity in the content of the documents used to collect information on births in the United States. It has been modified in each State to the extent required by the particular State's needs or by special provisions of the State's vital statistics law. However, most State certificates conform closely in content to the standard certificate.

The first standard certificate of birth was developed in 1900. Since then, it has been revised periodically by the national vital statistics agency through consultation with State health officers and registrars; Federal agencies concerned with vital statistics; national, State, and county medical societies; and others working in public health, social welfare, demography, and insurance. This procedure has assured careful evaluation of each item for its current and future usefulness for legal, medical, demographic, and research purposes. New items have been added when necessary, and old items have been modified to ensure better reporting or, in some cases, dropped when their usefulness appeared to be limited.

1989 revision--Effective January 1, 1989, a revised U.S. Standard Certificate of Live Birth (figure 4-A) replaced the 1978 revision. This revision provided a wide variety of new information on maternal and infant health characteristics, representing a significant departure from previous versions in both content and format. The most significant format change was the use of check boxes to obtain detailed medical and health information about the mother and child. It has been demonstrated that this format produces higher quality and more complete information than do open-ended items.

The reformatted items included "Medical Risk Factors for This Pregnancy," which combines the former items "Complications of Pregnancy" and "Concurrent Illnesses or Conditions Affecting the Pregnancy." "Complications

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of Labor and/or Delivery” and “Congenital Anomalies of Child” also have been revised from the open-ended format. For each of these items at least 15 specific conditions have been identified.

Several new items were added to the revised certificate. Included are items to obtain information on tobacco and alcohol use during pregnancy, weight gain during pregnancy, obstetric procedures, method of delivery, and abnormal conditions of the newborn. These items can be used to monitor the health practices of the mother that can affect pregnancy and the use of technology in childbirth, and to identify babies with specific abnormal conditions. When combined with other socioeconomic and health data, these items provide a wealth of information relevant to the etiology of low birth weight and other adverse pregnancy outcomes.

Another modification was the addition of a Hispanic identifier for the mother and father. Although NCHS had recommended that States add items to identify the Hispanic or ethnic origin of the newborn's parents, concurrent with the 1978 revision of the U.S. Standard Certificate of Live Birth and reported data from the cooperating States since that year, the items were new to the U.S. Standard Certificate for 1989.

The 1989 revised certificate also provided more detail than previously requested on the birth attendant and place of birth. This permits a more in-depth analysis of the number and characteristics of births by attendant and type of facility and a comparison of differences in outcome. For further discussion see individual sections for each item.

Classification of data

One of the principal values of vital statistics data is realized through the presentation of rates that are computed by relating the vital events of a class to the population of a similarly defined class. Vital statistics and population statistics, therefore, must be classified according to similarly defined systems and tabulated in comparable groups. Even when the variables common to both, such as geographic area, age, race, and sex, have been similarly classified and tabulated, differences between the enumeration method of obtaining population data and the registration method of obtaining vital statistics data may result in significant discrepancies.

The general rules used to classify geographic and personal items for live births are set forth in “Vital Statistics Classification and Coding Instructions for Live Birth Records, 1999,” *NCHS Instruction Manual*, Part 3a (9). This material is incorporated in the basic file layout on the CD-ROM. The instruction materials are for States to use in coding the data items; they do not include any NCHS recodes. So, the file layout is a better source of information, since it provides the exact codes and recodes that are available. The classification of certain important items is discussed in the following pages. See table A for a listing of items and the percent of records that were not stated for each State, Puerto Rico, Virgin Islands, Guam, American Samoa, and the Northern Marianas.

Classification by occurrence and residence

Births to U.S. residents occurring outside this country are not reallocated to the United States. In tabulations by place of residence, births occurring within the United States to U.S. citizens and to resident aliens are allocated to the usual place of residence of the mother in the United States, as reported on the birth certificate. Beginning in 1970 births to nonresidents of the United States occurring in the United States are excluded from these tabulations. From 1966 to 1969 births occurring in the United States to mothers who were nonresidents of the United States were considered as births to residents of the exact place of occurrence; in 1964 and 1965 all such births were allocated to “balance of county” of occurrence even if the birth occurred in a city. The change in coding beginning in 1970 to exclude births to nonresidents of the United States from residence data significantly affects the comparability of data with years before 1970 only for Texas.

For the total United States the tabulations by place of residence and by place of occurrence are not identical. Births to nonresidents of the United States are included in data by place of occurrence but excluded from data by place of residence, as previously indicated. See table B for the number of births by residence and occurrence for the 50 States and the District of Columbia for 1999.

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Residence error--A nationwide test of birth-registration completeness in 1950 provided measures of residence error for natality statistics. According to this test, errors in residence reporting for the country as a whole tend to overstate the number of births to residents of urban areas and to understate the number of births to residents of other areas. This tendency has assumed special importance because of a concomitant development--the increased utilization of hospitals in cities by residents of nearby places--with the result that a number of births are erroneously reported as having occurred to residents of urban areas. Another factor that contributes to this overstatement of urban births is the customary practice of using "city" addresses for persons living outside the city limits. Residence error should be taken into consideration in interpreting data for small areas and for cities. Both birth and infant mortality patterns can be affected.

Incomplete residence--Beginning in 1973 where only the State of residence is reported with no city or county specified and the State named is different from the State of occurrence, the birth is allocated to the largest city of the State of residence. Before 1973 such births were allocated to the exact place of occurrence.

Geographic classification

The rules followed in the classification of geographic areas for live births are contained in the instruction manual mentioned previously. The geographic code structure for 1999 is given in another manual, "Vital Records Geographic Classification, 1995," *NCHS Instruction Manual*, Part 8 is included with the documentation file on CD-ROM (1). The geographic code structure in use is based on results of the 1990 Census of Population.

United States--In the statistical tabulations, "United States" refers only to the aggregate of the 50 States and the District of Columbia. Alaska has been included in the U.S. tabulations since 1959 and Hawaii since 1960.

Metropolitan statistical areas--The metropolitan statistical areas and primary metropolitan statistical areas (MSA's and PMSA's) used in this report are those established by the U.S. Office of Management and Budget as of April 1, 1990, and used by the U.S. Bureau of the Census (10) except in the New England States.

Except in the New England States, an MSA has either a city with a population of at least 50,000, or a Bureau of the Census urbanized area of at least 50,000 and a total MSA population of at least 100,000. A PMSA consists of a large urbanized county, or cluster of counties, that demonstrates very strong internal economic and social links and has a population over 1 million. When PMSA's are defined, the large area of which they are component parts is designated a Consolidated Metropolitan Statistical Area (CMSA) (11).

In the New England States the U.S. Office of Management and Budget uses towns and cities rather than counties as geographic components of MSA's and PMSA's. NCHS cannot, however, use this classification for these States because its data are not coded to identify all towns. Instead, the New England County Metropolitan Areas (NECMA's) are used. These areas are established by the U.S. Office of Management and Budget (12) and are made up of county units.

Metropolitan and nonmetropolitan counties--Independent cities and counties included in MSA's and PMSA's or NECMA's are included in data for metropolitan counties; all other counties are classified as nonmetropolitan.

Population-size groups--Beginning in 1994 vital statistics data for cities and certain other urban places have been classified according to the population enumerated in the 1990 Census of Population. Data are available for individual cities and other urban places of 100,000 or more population. Data for the remaining areas not separately identified are shown in the tables under the heading "Balance of area" or "Balance of county." Classification of areas for 1982-93 was determined by the population enumerated in the 1980 Census of Population. As a result of changes in the enumerated population between 1980 and 1990, some urban places identified in previous reports are no longer included, and a number of other urban places have been added.

Urban places other than incorporated cities for which vital statistics data are shown in the tabulated data in "Vital Statistics of the United States, Natality" include the following:

- C Each town in New England, New York, and Wisconsin and each township in Michigan, New Jersey, and Pennsylvania that had no incorporated municipality as a subdivision and had either 25,000 inhabitants or more,

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or a population of 10,000 to 25,000 and a density of 1,000 persons or more per square mile.

- C Each county in States other than those indicated above that had no incorporated municipality within its boundary and had a density of 1,000 persons or more per square mile. (Arlington County, Virginia, is the only county classified as urban under this rule.)
- C Each place in Hawaii with 10,000 or more population. (There are no incorporated cities in Hawaii.)

Places of less than 100,000 population are not separately identified on the public-use file because of confidentiality limitations.

Race or national origin

Beginning with the 1989 data year, birth data are tabulated primarily by race of mother. In 1988 and prior years the race or national origin shown in tabulations was that of the newborn child. The race of the child was determined for statistical purposes by an algorithm based on the race of the mother and father as reported on the birth certificate. When the parents were of the same race, the race of the child was the same as the race of the parents. When the parents were of different races and one parent was white, the child was assigned to the race of the other parent. When the parents were of different races and neither parent was white, the child was assigned to the race of the father, with one exception--if either parent was Hawaiian, the child was assigned to Hawaiian. If race was missing for one parent, the child was assigned the race of the parent for whom it was reported. When information on race was missing for both parents, the race of the child was considered not stated and the birth was allocated according to rules discussed on page 4 of the Technical Appendix, volume I, *Vital Statistics of the United States*, 1988. In 1989 the criteria for reporting the race of the parents did not change and continues to reflect the response of the informant (usually the mother). Beginning with the 1992 issue of *Vital Statistics of the United States*, Volume I, *Nativity*, trend data for years beginning with 1980 have been retabulated by race of mother.

The most important factor influencing the decision to tabulate births by race of the mother was the decennial revision of the U.S. Standard Certificate of Live Birth in 1989. This revision included many more health questions that are directly associated with the mother, including alcohol and tobacco use, weight gain during pregnancy, medical risk factors, obstetric procedures, complications of labor and/or delivery, and method of delivery. Additionally, many of the other items that have been on the birth certificate for more than two decades also relate directly to the mother, for example, marital status, education level, and receipt of prenatal care. It is more appropriate to use the race of the mother than the race of the child in tabulating these items.

A second factor has been the increasing incidence of interracial parentage. When race is aggregated into the four categories mandated in 1977 by the Office of Management and Budget, the proportion of children born to parents of different races is 5.1 percent, more than double the percent in 1977 (2.0 percent). More than half of these births were to white mothers and fathers of another race (55 percent in 1999). There have been two major consequences of the increasing interracial parentage. One is the effect on birth rates by race. The number of white births under the former procedures has been arbitrarily limited to infants whose parents were both white (or one parent if the race of only one parent was reported). At the same time, the number of births of other races has been arbitrarily increased to include all births to white mothers and fathers of other races. Thus, prior to 1989, if race of mother had been used, birth rates per 1,000 white women in a given age group would have been higher, while comparable rates for black women and women of other races would have been lower. The other consequence of increasing interracial parentage is the impact on the racial differential in various characteristics of births, particularly in cases where there is generally a large racial disparity, such as the incidence of low birthweight. In this instance, the racial differential is larger when the data are tabulated by race of mother rather than by race of child. The same effect has been noted for characteristics such as nonmarital childbearing, preterm births, late or no prenatal care, and low educational attainment of mother.

The third factor influencing the change is the growing proportion of births with race of father not stated, 14 percent in 1999. Although this proportion has stabilized and declined slightly in the 1990's, it is still higher than in 1979, 11 percent. The high proportion of records with the father's race not reported reflects the increase in the

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proportion of births to unmarried women; in many cases no information is reported on the father. These births were already assigned the race of the mother because there is no alternative. Tabulating births by race of mother provides a more uniform approach, rather than a necessarily arbitrary combination of parental races.

The change in the tabulation of births by race presents some problems when analyzing birth data by race, particularly trend data. The problem is likely to be acute for races other than white and black.

The categories for race or national origin are "White," "Black," "American Indian" (including Aleuts and Eskimos), "Chinese," "Japanese," "Hawaiian," "Filipino," and "Other Asian or Pacific Islander" (including Asian Indian). Before 1992 there was also an "other" category, which is now combined with the "Not stated" category. Before 1978 the category "Other Asian or Pacific Islander" was not identified separately but included with "Other" races. The separation of this category from "other" allows identification of the category "Asian or Pacific Islander" by combining the new category "Other Asian or Pacific Islander" with Chinese, Japanese, Hawaiian, and Filipino.

Beginning in 1992, NCHS contracted with seven States with the highest API populations to code births to additional API subgroups. The API subgroups include births to Vietnamese, Asian Indian, Korean, Samoan, Guamanian, and other API women. The seven States included in this reporting area are: California, Hawaii, Illinois, New Jersey, New York, Texas, and Washington. At least two-thirds of the U.S. population of each of these additional API groups lived in the seven-State reporting area (13). The data are available on the detailed natality tapes and CD-ROMs beginning with the 1992 data year. An analytic report based on the 1992 data year is also available upon request (14). Minnesota began reporting additional API subgroups in 1996 and Virginia began reporting in 1998. Missouri and West Virginia started reporting in 1999 for a total of 11 reporting states.

The category "White" comprises births reported as white and births where race, as distinguished from Hispanic origin, is reported as Hispanic. Before 1964 all births for which race or national origin was not stated were classified as white. Beginning in 1964 changes in the procedures for allocating race when race or national origin is not stated have changed the composition of this category. (See discussion on "Race or national origin not stated.")

If the race or national origin of an Asian parent is ill-defined or not clearly identifiable with one of the categories used in the classification (for example, if "Oriental" is entered), an attempt is made to determine the specific race or national origin from the entry for place of birth. If the birthplace is China, Japan, or the Philippines, the race of the parent is assigned to that category. When race cannot be determined from birthplace, it is assigned to the category "Other Asian or Pacific Islander."

Race or national origin not stated--If the race of the mother is not defined or not identifiable with one of the categories used in the classification (0.6 percent of births in 1999) and the race of the father is known, the race of the father is assigned to the mother. Where information for both parents is missing, the race of the mother is allocated electronically according to the specific race of the mother on the preceding record with a known race of mother. Data for both parents were missing for only 0.4 percent of birth certificates for 1999. Nearly all statistics by race or national origin for the United States as a whole in 1962 and 1963 are affected by a lack of information for New Jersey, which did not report the race of the parents in those years. Birth rates by race for those years are computed on a population base that excluded New Jersey. For the method of estimating the U.S. population by age, sex, and race excluding New Jersey in 1962 and 1963, see page 4-8 in the Technical Appendix of volume I, *Vital Statistics of the United States*, 1963.

Age of mother

Beginning in 1989 an item on the birth certificate asks for "Date of Birth." In previous years, "Age (at time of this birth)" was requested. Not all States revised this item and therefore the age of mother either is derived from the reported month and year of birth or coded as stated on the certificate. In 1999, the mother's age was reported directly by five States (Kentucky, Nevada, North Dakota, Virginia, and Wyoming) and American Samoa. From 1964 to 1996, the age of mother was edited for 10-49 years. When the age of mother was computed to be under 10 years or 50 years or over, it was considered not stated and was assigned as described below. Beginning in 1997, age of mother is edited for ages 10-54 years. When the age of mother is computed to be under 10 years or 55 years or

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over, it is considered not stated and was assigned as described below. A review and verification of unedited birth data for 1996 showed that the vast majority of births reported as occurring to women aged 50 years and older were to women aged 50-54 years. The number of births to women 50-54 years is too small for computing age-specific birth rates. These births have been included with births to women 45-49 for computing birth rates.

Age-specific birth rates are based on populations of women by age, prepared by the U.S. Bureau of the Census. In census years the decennial census counts are used. In intercensal years, estimates of the population of women by age are published by the U.S. Bureau of the Census in *Current Population Reports*.

The 1990 Census of Population derived age in completed years as of April 1, 1990, from the responses to questions on age at last birthday and month and year of birth, with the latter given preference. In the 1960, 1970, and the 1980 Census of Population, age was also derived from month and year of birth. "Age in completed years" was asked in censuses before 1960. This was nearly the equivalent of the former birth certificate question, which the 1950 test of matched birth and census records confirms by showing a high degree of consistency in reporting age in these two sources (15). More recently, reporting of maternal age on the birth certificate was compared with reporting of age in a survey of women who had recently given birth. Reporting of age was very consistent between the two sources (16).

Median age of mother--Median age is the value that divides an age distribution into two equal parts, one-half of the values being less and one-half being greater. Median ages of mothers for 1960 to the present have been computed from birth rates for 5-year age groups rather than from birth frequencies. This method eliminates the effects of changes in the age composition of the childbearing population over time. Changes in the median ages from year to year can thus be attributed solely to changes in the age-specific birth rates. Trend data on the median age is shown in table 1-5 of "Vital Statistics of the United States, volume 1, natality (at <http://www.cdc.gov/nchs/datawh/statab/unpubd/natality/natab97.htm>).

Not stated date of birth of mother-- In 1999, age of mother was not reported on 0.02% of the records. Beginning in 1964 birth records with date of birth of mother and/or age of mother not stated have had age imputed according to the age of mother from the previous birth record of the same race and total-birth order (total of fetal deaths and live births). (See "Computer Edits for Natality Data, Effective 1993" NCHS Instruction Manual, Part 12, page 9; available on request from the Division of Vital Statistics.) In 1963 birth records with age not stated were allocated according to the age appearing on the record previously processed for a mother of identical race and parity (number of live births). For 1960-62 not stated ages were distributed in proportion to the known ages for each racial group. Before 1960 this was done for age-specific birth rates but not for the birth frequency tables, which showed a separate category for age not stated.

Age of father

Age of father is derived from the reported date of birth or coded as stated on the birth certificate. If the age is under 10 years, it is considered not stated and grouped with those cases for which age is not stated on the certificate. Information on age of father is often missing on birth certificates of children born to unmarried mothers, greatly inflating the number of "not stated" in all tabulations by age of father. In computing birth rates by age of father, births tabulated as age of father not stated are distributed in the same proportions as births with known age within each 5-year-age classification of the mother. This procedure is followed because, while father's age is missing in 14 percent of the birth certificates in 1999, one third of these were on records where the mother is a teenager. This distribution procedure is done separately by race. The resulting distributions are summed to form a composite frequency distribution that is the basis for computing birth rates by age of father. This procedure avoids the distortion in rates that would result if the relationship between age of mother and age of father were disregarded. Births with age of father not stated are distributed only for rates and means, not for frequency tabulations (2).

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Live-birth order and parity

Live-birth order and parity classifications refer to the total number of live births the mother has had including the 1999 birth. Fetal deaths are excluded.

Live-birth order indicates what number the present birth represents; for example, a baby born to a mother who has had two previous live births (even if one or both are not now living) has a live-birth order of three. Parity indicates how many live births a mother has had. Before delivery a mother having her first baby has a parity of zero and a mother having her third baby has a parity of two. After delivery the mother of a baby who is a first live birth has a parity of one and the mother of a baby who is a third live birth has a parity of three.

Live-birth order and parity are determined from two items on the birth certificate, "Live births now living" and "Live births now dead."

Not stated birth order--Before 1969 if both of these items were blank, the birth was considered a first birth. Beginning in 1969, births for which the pregnancy history items were not completed have been tabulated as live-birth order not stated. As a result of this revised procedure, 22,686 births in 1969 that would have been assigned to the "First birth order" category under the old rules were assigned to the "Not stated" category.

All births tabulated in the "Not stated birth order" category are excluded from the computation of percents. In computing birth rates by live-birth order, births tabulated as birth order not stated are distributed in the same proportion as births of known live-birth order.

Date of last live birth

The date of last live birth was added to the U.S. Standard Certificate of Live Birth in 1968 for the purpose of providing information on child spacing. The interval since the last live birth is the difference between the date of last live birth and the date of present birth.

Beginning in 1995, NCHS ceased to collect information on the date of last live birth and thus the information on interval is only available from birth certificate data from 1968-94.

Educational attainment

Data on the educational attainment of both parents were collected beginning in 1968 and tabulated for publication in 1969 for the first time. Data on educational attainment is currently available only for the mother. Beginning in 1995, NCHS ceased to collect information on the educational attainment of the father and thus the information is available from birth certificate data only for 1969-94.

The educational attainment of the mother is defined as "the number of years of school completed." Only those years completed in "regular" schools are counted, that is, a formal educational system of public schools or the equivalent in accredited private or parochial schools. Business or trade schools, such as beauty and barber schools, are not considered "regular" schools for the purposes of this item. No attempt has been made to convert years of school completed in foreign school systems, ungraded school systems, and so forth, to equivalent grades in the American school system. Such entries are included in the category "not stated."

Women who have completed only a partial year in high school or college are tabulated as having completed the highest preceding grade. For those certificates on which a specific degree is stated, years of school completed is coded to the level at which the degree is most commonly attained; for example, women reporting B.A., A.B., or B.S. degrees are considered to have completed 16 years of school.

Education not stated--The category "Not stated" includes all records in reporting areas for which there is no information on years of school completed as well as all records for which the information provided is not compatible with coding specifications.

Births tabulated as education not stated are excluded from the computations of percents.

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Marital status

National estimates of births to unmarried women are based on two methods of determining marital status. For 1994 through 1996, birth certificates in 45 states and the District of Columbia included a question about the mother's marital status. Beginning in 1997, the marital status of women giving birth in California and Nevada is determined by a direct question in the birth registration process. Beginning June 15, 1998, Connecticut discontinued inferring the mother's marital status and added a direct question on mother's marital status to the State's birth certificate.

In the two States (Michigan and New York) which used inferential procedures to compile birth statistics by marital status in 1999, a birth is inferred as nonmarital if either of these factors is present: a paternity acknowledgment was received or the father's name is missing. In recent years, a number of States have extended their efforts to identify the fathers when the parents are not married in order to enforce child support obligations. The presence of a paternity acknowledgment therefore is the most reliable indicator that the birth is nonmarital in the States not reporting this information directly; this is now the key indicator in the nonreporting States. The inferential procedures in current use represent a substantial departure from the method used before 1980 as well as those used during the 1980's to prepare national estimates of births to unmarried women, before 1980 the incidence of births to unmarried women in States with no direct question on marital status was assumed to be the same as the incidence in reporting States in the same geographic division (17). Inferential procedures in use during the 1980's relied heavily on a comparison of the surnames of the parents and the child to infer the mother's marital status. The procedures now in use depend, as noted above, on very reliable indicators, namely a paternity affidavit or missing information on the father.

The procedures for reporting marital status in California, Nevada, New York City changed beginning January 1, 1997. The methods used to determine marital status and the impact of the procedures on the data were discussed in detail in a previous report (17).

The use of inferential marital status data together with information from a direct question represents an attempt to use related information on the birth certificate to improve the quality of national data as well as to provide data for the individual nonreporting States. An evaluation of this method and its validity for California (the largest nonreporting State until 1997) has been published (18). Because of the continued substantial increases in nonmarital childbearing throughout the 1980's, the data have been intensively evaluated by the Division of Vital Statistics, NCHS (17).

The mother's marital status was not reported in 1999 on 0.03 percent of the birth records in States reporting this information from a direct question. Marital status was imputed as "married" for these records.

When births to unmarried women are reported as second or higher order births, it is not known whether the mother was married or unmarried when the previous deliveries occurred, because her marital status at the time of these earlier births is not available from the birth record.

Rates for 1940 and 1950 are based on decennial census counts. Rates for 1955-97 are based on a smoothed series of population estimates (17,19). Because of sampling error, the original U.S. Bureau of the Census population estimates by marital status fluctuate erratically from year to year; therefore, they have been smoothed so that the rates do not show similar variations. These rates differ from those published in volumes of *Vital Statistics of the United States* before 1969, which were based on the original estimates provided annually by the U.S. Bureau of the Census. Birth rates by marital status for 1971-79 have been revised and differ from rates published before 1980 in volumes of *Vital Statistics of the United States* (see "Computation of rates and other measures").

Place of delivery and attendant at birth

The 1989 revision of the U.S. Standard Certificate of Live Birth included separate categories for freestanding birthing centers, the mother's residence, and clinic or doctor's office as the place of birth. Prior to 1989, place of birth was classified simply as either "In hospital" or "Not in hospital." Births occurring in hospitals, institutions, clinics, centers, or homes were included in the category "In hospital." In this context the word "homes" does not refer to the mother's residence but to an institution, such as a home for unmarried women. Birthing centers were

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included in either category, depending on each State's assessment of the facility. Beginning in 1989 births occurring in clinics and in birthing centers not attached to a hospital are classified as "Not in hospital." This change in classification may account in part for the lower proportion of "In hospital" births compared with previous years. (The change in classification of clinics should have minor impact because comparatively few births occur in these facilities, but the effect of any change in classification of freestanding birthing centers is unknown.)

Beginning in 1975 the attendant at birth and place of delivery items were coded independently, primarily to permit the identification of the person in attendance at hospital deliveries. The 1989 certificate includes separate classifications for doctor of medicine (MD), doctor of osteopathy (DO), certified nurse midwife (CNM), other midwife, and other attendants. In earlier certificates births attended by certified nurse midwives were grouped with those attended by lay midwives. The 1989 certificate also facilitated the identification of home births, births in freestanding birthing centers, and births in clinics or physician offices.

Data for the "In hospital" category for 1975-88 include all births in clinics or maternity centers, regardless of the attendant. Data for 1975-77 published before 1980 included clinic and center births in the category "In hospital" only when the attendant was a physician. Therefore, data shown for 1975-77 published after 1980 differ from data published before 1980. As a result of this change, for 1975 an additional 12,352 births were classified as occurring in hospitals, raising the percent of births occurring in hospitals from 98.7 to 99.1. Similarly, for 1976 the number of births occurring in hospitals increased by 14,133 and the percent in hospitals raised from 98.6 to 99.1; for 1977 the increase is 15,937 and the percent in hospitals raised from 98.5 to 99.0. For 1974 and earlier the "In hospital" category includes all births in hospitals or institutions and births in clinics, centers, or maternity homes only when attended by physicians.

The "Not in hospital" category includes births for which no information is reported on place of birth. Before 1975 births for which the stated place of birth was a "doctor's office" and delivery was by a physician were included in the category "In hospital." Beginning in 1975 these births were tabulated as "Not in hospital" and included with births delivered by physicians in this category. Although the actual number of such births is unknown, the effect of the change is minimal. In 1974, 0.3 percent of all births were delivered by physicians outside of hospitals; in 1975 this proportion was 0.4 percent.

Babies born on the way to or on arrival at the hospital are classified as having been born in the hospital. This may account for some of the hospital births not delivered by physicians or midwives.

Beginning in 1993, all in-hospital births occurring in Illinois where the attendant was classified as an "other" midwife were changed to certified nurse-midwife. This was necessary because almost all of these births were delivered by midwives certified by the American College of Nurse Midwives but because Illinois does not certify midwives, many of these births were classified as "other" midwives.

Procedures in some hospitals may require that a physician be listed as the attendant for every birth and that a physician sign each birth certificate, even if the birth is attended by a midwife and no physician is physically present. Therefore, the number of live births attended by midwives may be understated in some areas.

Birthweight

Birthweight is reported in some areas in pounds and ounces rather than in grams. However, the metric system has been used in tabulating and presenting the statistics to facilitate comparison with data published by other groups. The categories for birthweight were changed in 1979 to be consistent with the recommendations in the *Ninth Revision of the International Classification of Diseases (ICD-9)* and remain the same for the Tenth Revision of the International Classification of Diseases (ICD-10) (4). The categories in gram intervals and their equivalents in pounds and ounces are as follows:

Less than 500 grams = 1 lb 1 oz or less

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500-999 grams = 1 lb 2 oz-2 lb 3 oz
1,000-1,499 grams = 2 lb 4 oz-3 lb 4 oz
1,500-1,999 grams = 3 lb 5 oz-4 lb 6 oz
2,000-2,499 grams = 4 lb 7 oz-5 lb 8 oz
2,500-2,999 grams = 5 lb 9 oz-6 lb 9 oz
3,000-3,499 grams = 6 lb 10 oz-7 lb 11 oz
3,500-3,999 grams = 7 lb 12 oz-8 lb 13 oz
4,000-4,499 grams = 8 lb 14 oz-9 lb 14 oz
4,500-4,999 grams = 9 lb 15 oz-11 lb 0 oz
5,000 grams or more = 11 lb 1 oz or more

The ICD-9 defines low birthweight as less than 2,500 grams. This is a shift of 1 gram from the previous criterion of 2,500 grams or less, which was recommended by the American Academy of Pediatrics in 1935 and adopted in 1948 by the World Health Organization in the *Sixth Revision of the International Lists of Diseases and Causes of Death*.

After data classified by pounds and ounces are converted to grams, median weights are computed and rounded before publication. To establish the continuity of class intervals needed to convert pounds and ounces to grams, the end points of these intervals are assumed to be half an ounce less at the lower end and half an ounce more at the upper end. For example, 2 lb 4 oz-3 lb 4 oz is interpreted as 2 lb 3 ½ oz-3 lb 4 ½ oz.

Births for which birthweight is not reported are excluded from the computation of percents and medians.

Period of gestation

The period of gestation is defined as beginning with the first day of the last normal menstrual period (LMP) and ending with the day of the birth. The LMP is used as the initial date because it can be more accurately determined than the date of conception, which usually occurs 2 weeks after the LMP.

Births occurring before 37 completed weeks of gestation are considered to be “preterm” or “premature” for purposes of classification. At 37-41 weeks gestation, births are considered to be “term,” and at 42 completed weeks and over, “postterm.” These distinctions are according to the ICD-9 and ICD-10 (4) definitions.

The 1989 revision of the U.S. Standard Certificate of Live Birth included a new item, “clinical estimate of gestation,” that is being compared with length of gestation computed from the LMP date when the latter appears to be inconsistent with birthweight. This is done for normal weight births of apparently short gestations and very low birthweight births reported to be full term. The clinical estimate also was used if the date of the LMP was not reported. The period of gestation for 5.1 percent of the births in 1999 was based on the clinical estimate of gestation. For 97 percent of these records the clinical estimate was used because the LMP date was not reported. For the remaining 3 percent the clinical estimate was used because it was compatible with the reported birth weight, whereas the LMP-computed gestation was not. In cases where the reported birthweight was inconsistent with both the LMP-computed gestation and the clinical estimate of gestation, the LMP-computed gestation was used if it was within 5 weeks of the clinical estimate and birth weight was reclassified as “not stated.” This was necessary for 336 births, less than 0.01 percent of all birth records in 1999. If the reported birthweight was inconsistent with both the LMP-computed gestation and the clinical estimate of gestation, gestation and birthweight were classified as “not stated” if the LMP-computed gestation was not within 5 weeks of the clinical estimate. These changes result in only a very small discontinuity in the data.

Before 1981 the period of gestation was computed only when there was a valid month, day, and year of LMP. However, length of gestation could not be determined from a substantial number of live-birth certificates each year because the day of LMP was missing. Beginning in 1981 weeks of gestation have been imputed for records with missing day of LMP when there is a valid month and year. Each such record is assigned the gestational period in weeks of the preceding record that has a complete LMP date with the same computed months of gestation and the same 500-gram birthweight interval. The effect of the imputation procedure is to increase slightly the proportion of

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preterm births and to lower the proportion of births at 39, 40, 41, and 42 weeks of gestation. A more complete discussion of this procedure and its implications is presented in a previous report (20).

Because of postconception bleeding or menstrual irregularities, the presumed date of LMP may be in error. In these instances the computed gestational period may be longer or shorter than the true gestational period, but the extent of such errors is unknown.

Month of pregnancy prenatal care began

For those records in which the name of the month is entered for this item, instead of first, second, third, and so forth, the month of pregnancy in which prenatal care began is determined from the month named and the month last normal menses began. For these births, if the item "Date last normal menses began" is not stated, the month of pregnancy in which prenatal care began is tabulated as not stated.

Number of prenatal visits

Tabulations of the number of prenatal visits were presented for the first time in 1972. Beginning in 1989 these data were collected from the birth certificates of all States. Percent distributions and the median number of prenatal visits exclude births to mothers who had no prenatal care.

Apgar score

The 1- and 5-minute Apgar scores were added to the U.S. Standard Certificate of Live Birth in 1978 to evaluate the condition of the newborn infant at 1 and 5 minutes after birth. The Apgar score is a useful measure of the need for resuscitation and a predictor of the infant's chances of surviving the first year of life. It is a summary measure of the infant's condition based on heart rate, respiratory effort, muscle tone, reflex irritability, and color. Each of these factors is given a score of 0, 1, or 2; the sum of these 5 values is the Apgar score, which ranges from 0 to 10. A score of 10 is optimum, and a low score raises some doubts about the survival and subsequent health of the infant. Beginning in 1995, NCHS only collected information on the 5-minute Apgar score. Since 1991, the reporting area for the 5-minute Apgar score has been comprised of 48 States and the District of Columbia, accounting for 78 percent of all births in the United States in 1999. California and Texas did not have information on Apgar scores on their birth certificate.

Tobacco and alcohol use during pregnancy

The checkbox format allows for classification of a mother as a smoker or drinker during pregnancy and for reporting the average number of cigarettes smoked per day or drinks consumed per week. When smoking and/or drinking status is not reported or is inconsistent with the quantity of cigarettes or drinks reported, the status is changed to be consistent with the amount reported. For example, if the drinking status is reported as "no" but one or more average drinks a week are reported, the mother is classified as a drinker. If the number of cigarettes smoked per day is reported as one or more, the mother is considered a smoker. When one (or a fraction of one) drink a week is recorded, the mother is classified as a drinker. For records on which the number of drinks or number of cigarettes is reported as a span, for example, 10-15, the lower number is used. The number of drinkers and number of drinks reported on birth certificates are believed to underestimate actual alcohol use.

For 1999, information on number of cigarettes smoked per day was reported in a consistent manner for 46 States, the District of Columbia, and New York City (figure 4-A). Indiana and New York State (except for New York City) reported this information but in a format that was inconsistent with the NCHS standards. This reporting area accounted for 87 percent of all births in the U.S. in 1999. Information was not available for California and South Dakota.

Weight gained during pregnancy

Weight gain is reported in pounds. A loss of weight is reported as zero gain. Computations of median weight

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gain were based on ungrouped data. This item was included on the certificates of 49 States and the District of Columbia; California did not report this information. This reporting area excluding California accounted for 87 percent of all births in the United States in 1999.

Medical risk factors for this pregnancy

An item on medical risk factors was included on the 1989 birth certificate, but 2 States did not report all of the 16 risk factors in 1999. Texas did not report genital herpes or uterine bleeding, and Kansas did not report Rh sensitization.

The format allows for the designation of more than one risk factor and includes a choice of "None." Accordingly, if the item is not completed, it is classified as "Not stated."

The following definitions are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials for the Association for Vital Records and Health Statistics (21).

Definitions of medical terms:

Anemia--Hemoglobin level of less than 10.0 g/dL during pregnancy or a hematocrit of less than 30 percent during pregnancy.

Cardiac disease--Disease of the heart.

Acute or chronic lung disease--Disease of the lungs during pregnancy.

Diabetes--Metabolic disorder characterized by excessive discharge of urine and persistent thirst; includes juvenile onset, adult onset, and gestational diabetes during pregnancy.

Genital herpes--Infection of the skin of the genital area by herpes simplex virus.

Hydramnios/oligohydramnios--Any noticeable excess (hydramnios) or lack (oligohydramnios) of amniotic fluid.

Hemoglobinopathy--A blood disorder caused by alteration in the genetically determined molecular structure of hemoglobin (for example, sickle cell anemia).

Hypertension, chronic--Blood pressure persistently greater than 140/90, diagnosed prior to onset of pregnancy or before the 20th week of gestation.

Hypertension, pregnancy-associated--An increase in blood pressure of at least 30 mm Hg systolic or 15 mm Hg diastolic on two measurements taken 6 hours apart after the 20th week of gestation.

Eclampsia--The occurrence of convulsions and/or coma unrelated to other cerebral conditions in women with signs and symptoms of pre-eclampsia.

Incompetent cervix--Characterized by painless dilation of the cervix in the second trimester or early in the third trimester of pregnancy, with prolapse of membranes through the cervix and ballooning of the membranes into the vagina, followed by rupture of membranes and subsequent expulsion of the fetus.

Previous infant 4,000+ grams--The birthweight of a previous live-born child was over 4,000 grams (8 lbs 13 oz).

Previous preterm or small-for-gestational-age infant--Previous birth of an infant prior to term (before 37 completed weeks of gestation) or of an infant weighing less than the 10th percentile for gestational age using a standard weight-for-age chart.

Renal disease--Kidney disease.

Rh sensitization--The process or state of becoming sensitized to the Rh factor as when an Rh-negative woman is pregnant with an Rh-positive fetus.

Uterine bleeding--Any clinically significant bleeding during the pregnancy, taking into consideration the stage of pregnancy; any second or third trimester bleeding of the uterus prior to the onset of labor.

Obstetric procedures

This item includes six specific obstetric procedures. Birth records with "Obstetric procedures" left blank are

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considered “not stated.” Data on obstetric procedures were reported by all States and the District of Columbia in 1999.

The following definitions are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials for the National Association for Public Health Statistics and Information Systems (NAPHSIS), formerly the Association for Vital Records and Health Statistics (21).

Definitions of medical terms:

Amniocentesis--Surgical transabdominal perforation of the uterus to obtain amniotic fluid to be used in the detection of genetic disorders, fetal abnormalities, and fetal lung maturity.

Electronic fetal monitoring--Monitoring with external devices applied to the maternal abdomen or with internal devices with an electrode attached to the fetal scalp and a catheter through the cervix into the uterus, to detect and record fetal heart tones and uterine contractions.

Induction of labor--The initiation of uterine contractions before the spontaneous onset of labor by medical and/or surgical means for the purpose of delivery.

Stimulation of labor--Augmentation of previously established labor by use of oxytocin.

Tocolysis--Use of medications to inhibit preterm uterine contractions to extend the length of pregnancy and therefore avoid a preterm birth.

Ultrasound--Visualization of the fetus and placenta by means of sound waves.

Complications of labor and/or delivery

The checkbox format allows for the selection of 15 specific complications and for the designation of more than 1 complication where appropriate. A choice of “None” is also included. Accordingly, if the item is not completed, it is classified as “not stated.”

All States and the District of Columbia included this item on their birth certificates in 1999. However, Texas did not report all of the complications. Texas did not report anesthetic complications or fetal distress.

The following definitions are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials (21).

Definitions of medical terms:

Febrile--A fever greater than 100 degrees F. or 38 C. occurring during labor and/or delivery.

Meconium, moderate/heavy--Meconium consists of undigested debris from swallowed amniotic fluid, various products of secretion, excretion, and shedding by the gastrointestinal tract; moderate to heavy amounts of meconium in the amniotic fluid noted during labor and/or delivery.

Premature rupture of membranes (more than 12 hours)--Rupture of the membranes at any time during pregnancy and more than 12 hours before the onset of labor.

Abruptio placenta--Premature separation of a normally implanted placenta from the uterus.

Placenta previa--Implantation of the placenta over or near the internal opening of the cervix.

Other excessive bleeding--The loss of a significant amount of blood from conditions other than abruptio placenta or placenta previa.

Seizures during labor--Maternal seizures occurring during labor from any cause.

Precipitous labor (less than 3 hours)--Extremely rapid labor and delivery lasting less than 3 hours.

Prolonged labor (more than 20 hours)--Abnormally slow progress of labor lasting more than 20 hours.

Dysfunctional labor--Failure to progress in a normal pattern of labor.

Breech/malpresentation--At birth, the presentation of the fetal buttocks rather than the head, or other malpresentation.

Cephalopelvic disproportion--The relationship of the size, presentation, and position of the fetal head to the maternal pelvis prevents dilation of the cervix and/or descent of the fetal head.

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Cord prolapse--Premature expulsion of the umbilical cord in labor before the fetus is delivered.

Anesthetic complications--Any complication during labor and/or delivery brought on by an anesthetic agent or agents.

Fetal distress--Signs indicating fetal hypoxia (deficiency in amount of oxygen reaching fetal tissues).

Abnormal conditions of the newborn

This item provides information on eight specific abnormal conditions. More than one abnormal condition may be reported for a given birth or "None" may be selected. If the item is not completed it is tabulated as "not stated." This item was included on the birth certificates of all States and the District of Columbia in 1999. However, four areas did not include all conditions. Nebraska and Texas did not report birth injury, New York City did not report assisted ventilation less than 30 minutes or assisted ventilation of 30 minutes or more, and Wisconsin did not report fetal alcohol syndrome.

The following definitions are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics (21).

Definitions of medical terms:

Anemia--Hemoglobin level of less than 13.0 g/dL or a hematocrit of less than 39 percent.

Birth injury--Impairment of the infant's body function or structure due to adverse influences that occurred at birth.

Fetal alcohol syndrome--A syndrome of altered prenatal growth and development occurring in infants born of women who consumed excessive amounts of alcohol during pregnancy.

Hyaline membrane disease/RDS--A disorder primarily of prematurity, manifested clinically by respiratory distress and pathologically by pulmonary hyaline membranes and incomplete expansion of the lungs at birth.

Meconium aspiration syndrome--Aspiration of meconium by the fetus or newborn, affecting the lower respiratory system.

Assisted ventilation (less than 30 minutes)--A mechanical method of assisting respiration for newborns with respiratory failure.

Assisted ventilation (30 minutes or more)--Newborn placed on assisted ventilation for 30 minutes or longer.

Seizures--A seizure of any etiology.

Congenital anomalies of child

The data provided in this item relate to 21 specific anomalies or anomaly groups. It is well documented that congenital anomalies, except for the most visible and most severe, are incompletely reported on birth certificates (22). The completeness of reporting specific anomalies depends on how easily they are recognized in the short time between birth and birth-registration. Forty-nine States and the District of Columbia included this item on their birth certificates (New Mexico did not). This reporting area included 99 percent of all births in the United States in 1999. The format allows for the identification of more than one anomaly including a choice of "None" should no anomalies be evident. The category "not stated" includes birth records for which the item is not completed.

The following definitions are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials (21).

Definitions of medical terms:

Anencephalus--Absence of the cerebral hemispheres.

Spina bifida/meningocele--Developmental anomaly characterized by defective closure of the bony encasement of the spinal cord, through which the cord and meninges may or may not protrude.

Hydrocephalus--Excessive accumulation of cerebrospinal fluid within the ventricles of the brain with

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consequent enlargement of the cranium.

Microcephalus--A significantly small head.

Other central nervous system anomalies--Other specified anomalies of the brain, spinal cord, and nervous system.

Heart malformations--Congenital anomalies of the heart.

Other circulatory/respiratory anomalies--Other specified anomalies of the circulatory and respiratory systems.

Rectal atresia/stenosis--Congenital absence, closure, or narrowing of the rectum.

Tracheo-esophageal fistula/Esophageal atresia--An abnormal passage between the trachea and the esophagus; esophageal atresia is the congenital absence or closure of the esophagus.

Omphalocele/gastroschisis--An omphalocele is a protrusion of variable amounts of abdominal viscera from a midline defect at the base of the umbilicus. In gastroschisis, the abdominal viscera protrude through an abdominal wall defect, usually on the right side of the umbilical cord insertion.

Other gastrointestinal anomalies--Other specified congenital anomalies of the gastrointestinal system.

Malformed genitalia--Congenital anomalies of the reproductive organs.

Renal agenesis--One or both kidneys are completely absent.

Other urogenital anomalies--Other specified congenital anomalies of the organs concerned in the production and excretion of urine, together with organs of reproduction.

Cleft lip/palate--Cleft lip is a fissure of elongated opening of the lip; cleft palate is a fissure in the roof of the mouth. These are failures of embryonic development.

Polydactyly/syndactyly/adactyly--Polydactyly is the presence of more than five digits on either hands and/or feet; syndactyly is having fused or webbed fingers and/or toes; adactyly is the absence of fingers and/or toes.

Club foot--Deformities of the foot, which is twisted out of shape or position.

Diaphragmatic hernia--Herniation of the abdominal contents through the diaphragm into the thoracic cavity usually resulting in respiratory distress.

Other musculoskeletal/integumental anomalies--Other specified congenital anomalies of the muscles, skeleton, or skin.

Down's syndrome--The most common chromosomal defect with most cases resulting from an extra chromosome (trisomy 21).

Other chromosomal anomalies--All other chromosomal aberrations.

Method of delivery

The birth certificate contains a checkbox item on method of delivery. The choices include vaginal delivery, with the additional options of forceps, vacuum, and vaginal birth after previous cesarean section (VBAC), as well as a choice of primary or repeat cesarean. When only forceps, vacuum, or VBAC is checked, a vaginal birth is assumed. In 1999 this information was collected from the birth certificates of all States and the District of Columbia.

Several rates are computed for method of delivery. The overall cesarean section rate or total cesarean rate is computed as the proportion of all births that were delivered by cesarean section. The primary cesarean rate is a measure that relates the number of women having a primary cesarean birth to all women giving birth who have never had a cesarean delivery. The denominator for this rate is the sum of women with a vaginal birth excluding VBACs and women with a primary cesarean birth. The rate for vaginal birth after previous cesarean (VBAC) delivery is computed by relating all VBAC deliveries to the sum of VBAC and repeat cesarean deliveries, that is, to women with a previous cesarean section. VBAC rates for first births exist because the rates are computed on the basis of previous pregnancies, not just live births.

Hispanic parentage

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Concurrent with the 1978 revision of the U.S. Certificate of Live Birth, NCHS recommended that items to identify the Hispanic or ethnic origin of the newborn's parents be included on birth certificates and has tabulated and evaluated these data from the reporting States. The 1989 revision of the U.S. Standard Certificate of Live Births includes items to identify the Hispanic origin of the parents. All 50 States and the District of Columbia reported Hispanic origin of the parents for 1999. In 1989 Louisiana, New Hampshire, and Oklahoma did not report this information; in 1990 New Hampshire and Oklahoma did not report, and in 1991-92 New Hampshire did not report Hispanic origin.

In computing birth and fertility rates for the Hispanic population, births with origin of mother not stated are included with non-Hispanic births rather than being distributed. Thus, rates for the Hispanic population are underestimates of the true rates to the extent that the births with origin of mother not stated (1.2 percent in 1999) were actually to Hispanic mothers. The population with origin not stated was imputed. The effect on the rates is believed to be small.

Quality of data

Although vital statistics data are useful for a variety of administrative and scientific purposes, they cannot be correctly interpreted unless various qualifying factors and methods of classification are taken into account. The factors to be considered depend on the specific purposes for which the data are to be used. It is not feasible to discuss all the pertinent factors in the use of vital statistics tabulations, but some of the more important ones should be mentioned.

Most of the factors limiting the use of data arise from imperfections in the original records or from the impracticability of tabulating these data in very detailed categories. These limitations should not be ignored, but their existence does not lessen the value of the data for most general purposes.

Completeness of registration

An estimated 99 percent of all births occurring in the United States in 1999 were registered; for white births registration was 99.4 percent complete and for all other births, 98.6 percent complete. These estimates are based on the results of the 1964-68 test of birth-registration completeness according to place of delivery (in or out of hospital) and race and on the 1999 proportions of births in these categories. The primary purpose of the test was to obtain current measures of registration completeness for births in and out of hospital by race on a national basis. Data for States were not available as they had been from the previous birth-registration tests in 1940 and 1950. A detailed discussion of the method and results of the 1964-68 birth-registration test is available (23). A more recent test has not been conducted.

The 1964-68 test has provided an opportunity to revise the estimates of birth-registration completeness for the years since the previous test in 1950 to reflect the improvement in registration. This has been done using registration completeness figures from the two tests by place of delivery and race. Estimates of registration completeness for four groups (based on place of delivery and race) for 1951-65 were computed by interpolation between the test results. (It was assumed that the data from the more recent test are for 1966, the midpoint of the test period.) The results of the 1964-68 test are assumed to prevail for 1966 and later years. These estimates were used with the proportions of births registered in these categories to obtain revised numbers of births adjusted for underregistration for each year. The overall percent of birth-registration completeness by race was then computed. Data adjusted for underregistration for 1951-59 have been revised to be consistent with the 1964-68 test results and differ slightly from data shown in annual reports for years before 1969. For these years the published number of births and birth rates for both racial groups have been revised slightly downward because the 1964-68 test indicated that previous adjustments to registered births were slightly inflated. Because registration completeness figures by age of mother and by live-birth order are not available from the 1964-68 test, it must be assumed that the relationships among these variables have not changed since 1950.

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*Discontinuation of adjustment for underregistration, 1960--*Adjustment for underregistration of births was discontinued in 1960 when birth registration for the United States was estimated to be 99.1 percent complete. This removed a bias introduced into age-specific rates when adjusted births classified by age were used. Age-specific rates are calculated by dividing the number of births to an age group of mothers by the population of women in that age group. Tests have shown that population figures are likely to be understated through census undercounts; these errors compensate for underregistration of births. Adjustment for underregistration of births, therefore, removes the compensating effect of under enumeration, biasing the age-specific rates more than when uncorrected birth and population data are used. (For further details see page 4-11 in the Technical Appendix of volume I, Vital Statistics of the United States, 1963.)

The age-specific rates used in the cohort fertility tables are an exception to the above statement. These rates are computed from births corrected for underregistration and population estimates adjusted for under enumeration and misstatement of age. Adjusted birth and population estimates are used for the cohort rates because they are an integral part of a series of rates, estimated with a consistent methodology. It was considered desirable to maintain consistency with respect to the cohort rates, even though it means that they will not be precisely comparable with other rates shown for 5-year age groups.

Completeness of reporting

Interpretation of these data must include evaluation of item completeness. The percent "not stated" is one measure of the quality of the data. Completeness of reporting varies among items and States. See table A for the percent of birth records on which specified items were not stated.

Quality control procedures

As electronic files are received at NCHS, they are automatically checked for completeness, individual item code validity, and unacceptable inconsistencies between data items. The registration area is notified of any problems. In addition, NCHS staff review the files on an ongoing basis to detect problems in overall quality such as inadequate reporting for certain items, failure to follow NCHS coding rules, and systems and software errors. Traditionally, quality assurance procedures were limited to review and analysis of differences between the NCHS and registration area code assignments for a small sample of records. In recent years, as electronic birth registration became prevalent, this procedure was augmented by analyses of year to year and area to area variations in the data. These analyses are based on preliminary tabulations of the data that are cumulated by state on a year to date basis each month. All differences that are judged to have consequences for quality and completeness are investigated by NCHS. In the review process, statistical tests are used to call initial attention to differences for possible follow-up. As necessary, registration areas are informed of differences encountered in the tables and asked to verify the counts or to determine the nature of the differences. Missing records (except those permanently voided) and other problems detected by NCHS are resolved and corrections transmitted to NCHS in the same manner as for those corrections identified by the registration area.

Random variation and significance testing for natality data

The number of births reported for an area is essentially a complete count, since more than 99 percent of all births are registered. While this number is not subject to sampling error, it may be affected by nonsampling errors such as mistakes in recording the mother's residence or age during the registration process.

When the number of births is used for analytic purposes the number of events that actually occurred can be thought of as one in a large series of possible results that could have occurred under the same circumstances. When considered in this way, the number of births is subject to random variation. The probable range of values may be estimated from the actual figures according to certain statistical assumptions.

The **confidence interval** (CI) is the range of values for the number of births, birth rates, or percent of births that you could expect in 95 out of 100 cases. The **confidence limits** are the end points of this range of values (the highest and lowest values). Confidence limits tell you how much the number of events or rates could vary under

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similar circumstances.

Confidence limits for numbers, rates, and percents can be estimated from the actual number of events. Procedures differ for rates and percents and also differ depending on the number of births on which these statistics are based. Below are detailed procedures and examples for each type of case.

95 percent Confidence Interval: 100 or more births

When the number of events is greater than 100, the data are assumed to be approximately normally distributed. Formulas for 95-percent confidence limits are:

$$\text{Lower limit} = B - (1.96 \times \sqrt{B})$$

$$\text{Upper limit} = B + (1.96 \times \sqrt{B})$$

where:

B = the number of births

Example

Suppose the number of first births to white women 40-44 years of age was 14,108. The 95-percent confidence limits for this number would be:

$$\begin{aligned} \text{Lower limit} &= 14,108 - [1.96 \times \sqrt{14,108}] \\ &= 14,108 - 233 \\ &= 13,875 \end{aligned}$$

$$\begin{aligned} \text{Upper limit} &= 14,108 + [1.96 \times \sqrt{14,108}] \\ &= 14,108 + 233 \\ &= 14,341 \end{aligned}$$

This means that the chances are 95 out of 100 that the actual number of first births to white women 40-44 years of age would lie between 13,875 and 14,341.

95 percent Confidence Interval: 1-99 births

When the number of births is less than 100 and the rate is small, the data are assumed to follow a Poisson probability distribution. Confidence limits are estimated using the following formulas:

$$\text{Lower limit} = B \times L$$

$$\text{Upper limit} = B \times U$$

where:

B = the number of births

L = the value in Table C that corresponds to the number B , using the 95 percent CI column

U = the value in Table C that corresponds to the number B , using the 95 percent CI column

Example

Suppose the number of first births to American Indian women 40-44 years of age was 47. The confidence limits for this number would be:

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$$\begin{aligned} \text{Lower limit} &= B \times L \\ &= 47 \times 0.73476 \\ &= 35 \end{aligned}$$

$$\begin{aligned} \text{Upper limit} &= B \times U \\ &= 47 \times 1.32979 \\ &= 63 \end{aligned}$$

This means that the chances are 95 out of 100 that the actual number of first births to American Indian women 40-44 years of age would lie between 35 and 63.

Computing confidence intervals for rates

The same statistical assumptions can be used to estimate the variability in birth rates. Again, one formula is used for rates based on numbers of events less than 100, and another formula for rates based on numbers of 100 or greater. For our purposes, assume that the denominators of these rates (the population estimates) have no error. While this assumption is technically correct only for denominators based on the census which occurs every 10 years, the error in intercensal population estimates is usually small, difficult to measure, and therefore not considered.

95 percent Confidence Interval: 100 or more births

In this case, use the following formula for the birth rate R based on the number of births B:

$$\begin{aligned} \text{Lower limit} &= R - [1.96 \times R / \sqrt{B}] \\ \text{Upper limit} &= R + [1.96 \times R / \sqrt{B}] \end{aligned}$$

where:

$$\begin{aligned} R &= \text{rate (births per 1,000 population)} \\ B &= \text{the number of births} \end{aligned}$$

Example

Suppose the first birth rate for white women 40-44 years of age was 1.55 per thousand, based on 14,108 births in the numerator. Therefore, the 95-percent confidence interval would be:

$$\begin{aligned} \text{Lower limit} &= 1.55 - [1.96 \times (1.55 / \sqrt{14,108})] \\ &= 1.55 - .026 \\ &= 1.52 \end{aligned}$$

$$\begin{aligned} \text{Upper limit} &= 1.55 + [1.96 \times (1.55 / \sqrt{14,108})] \\ &= 1.55 + .026 \\ &= 1.58 \end{aligned}$$

This means that the chances are 95 out of 100 that the actual first birth rate for white women 40-44 years of age lies between 1.52 and 1.58.

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95 percent Confidence Interval: 1-99 births

When the number of events in the numerator is less than 20, an asterisk is shown in place of the rate because there were too few births to compute a statistically reliable rate. When the number of events in the numerator is greater than 20 but less than 100, the confidence interval for a rate can be estimated using the two formulas which follow and the values in the 95 percent CI column of Table C.

$$\begin{aligned} \text{Lower limit} &= R \times L \\ \text{Upper limit} &= R \times U \end{aligned}$$

where:

- R = rate (births per 1,000 population)
- L = the value in Table C that corresponds to the number B in the numerator of the rate
- U = the value in Table C that corresponds to the number B in the numerator of the rate

Example

Suppose that the first birth rate for American Indian women 40-44 years of age was 0.54 per thousand, based on 47 births in the numerator. Using Table C:

$$\begin{aligned} \text{Lower limit} &= 0.54 \times 0.73476 = .40 \\ \text{Upper limit} &= 0.54 \times 1.32979 = .72 \end{aligned}$$

This means that the chances are 95 out of 100 that the actual first birth rate for American Indian women 40-44 year of age lies between .40 and .72.

Computing confidence intervals for Hispanic subgroups

Tables 6, 8, 9, and 14 in "Births: Final Data for 1999" and tables 1-4 and 1-12 in Vital Statistics of the United States, part I Natality show birth and fertility rates for Mexicans, Puerto Ricans, Cubans, and "Other" Hispanics. Population estimates are derived from the U.S. Bureau of the Census' Current Population Survey and adjusted to resident population control totals. As a result, the rates are subject to the variability of the denominator as well as the numerator. For these Hispanic subgroups only (not for all origin, total Hispanic, total non-Hispanic, non-Hispanic white, or non-Hispanic black populations), the formulas above would be substituted by the following formulas:

Approximate 95 percent Confidence Interval: 100 or more births

When the number of events in the numerator is greater than 100, the confidence interval for the birth rate can be estimated from the following formulas:

For crude and age-specific birth rates,

$$\begin{aligned} \text{Lower limit:} & R \pm 1.96 \left(R \left(\sqrt{\left(\frac{1}{B}\right) \% f \left(a \% \frac{b}{P}\right)} \right) \right) \\ \text{Upper limit:} & R \pm 1.96 \left(R \left(\sqrt{\left(\frac{1}{B}\right) \% f \left(a \% \frac{b}{P}\right)} \right) \right) \end{aligned}$$

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where

R = rate (births per 1,000 population).

B = total number of births upon which rate is based

f = factor that depends on whether the population estimate is based on demographic analysis or CPS and the number of years used, equals 0.670 for single year.

a and b are single year averages of the 1998 and 1999 CPS standard error parameters; a equals -0.000238 and b equals 7,486 (24,25).

P = total estimated population upon which rate is based

Example

Suppose that the fertility rate of Cuban American women 15-44 years of age was 51.2 per thousand based on 13,088 births in the numerator and an estimated resident population of 255,399 in the denominator. The 95 percent confidence interval would be:

$$\begin{aligned} \text{Lower limit} &= 51.2 - 1.96 * 51.2 * \sqrt{\frac{1}{13,088} + 0.670 * 0.000238 + \frac{7,486}{255,399}} \\ &= 51.2 - 1.96 * 51.2 * \sqrt{0.000076405 + (0.670 * 0.029073)} \\ &= 51.2 - 1.96 * 51.2 * \sqrt{0.019555} \\ &= 51.2 - 1.96 * 51.2 * 0.13984 \\ &= 37.17 \end{aligned}$$

$$\begin{aligned} \text{Upper limit} &= 51.2 + 1.96 * 51.2 * \sqrt{\frac{1}{13,088} + 0.670 * 0.000238 + \frac{7,486}{255,399}} \\ &= 51.2 + 1.96 * 51.2 * \sqrt{0.000076405 + (0.670 * 0.029073)} \\ &= 51.2 + 1.96 * 51.2 * \sqrt{0.019555} \\ &= 51.2 + 1.96 * 51.2 * 0.13984 \\ &= 65.23 \end{aligned}$$

This means that the chances are 95 out of 100 that the actual fertility rate of Cuban American women 15-44 years of age lies between 37.17 and 65.23.

Approximate 95 percent Confidence Interval: 1-99 births

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When the number of events in the numerator is less than 20, an asterisk is shown in place of the rate. When the number of events in the numerator is greater than 20 but less than 100, the confidence interval for the birth rate can be estimated using the formulas which follow and the values in Table C.

For crude and age-specific birth rates,

$$\text{Lower: } R (L (1 \& \acute{a} ' .96, B) (\left(1 \& 2.576 \sqrt{ f \left(a \% \frac{b}{P} \right) } \right))$$

$$\text{Upper: } R (U (1 \& \acute{a} ' .96, B) (\left(1 \& 2.576 \sqrt{ f \left(a \% \frac{b}{P} \right) } \right))$$

where

R = rate (births per 1,000 population).

B = total number of births upon which rate is based.

L = the value in Table C that corresponds to the number *B*, using the 96 percent CI column

U = the value in Table C that corresponds to the number *B*, using the 96 percent CI column

f = factor that depends on whether the population estimate is based on demographic analysis or CPS and the number of years used, equals 0.670 for single year.

a and *b* factors are CPS standard error parameters. (see previous section on 95 percent confidence interval for 100 or more births for description and specific values)

P = total estimated population upon which rate is based.

Example

Suppose that the birth rate of Puerto Rican American women 45-49 years of age was 0.4 per thousand, based on 35 births in the numerator and an estimated resident population of 87,892 in the denominator. Using Table C, the 95 percent confidence interval would be:

$$\begin{aligned} \text{Lower limit} &= 0.4 * 0.68419 * \left(1 - 2.576 \sqrt{0.670 * 0.000238 + \frac{7,486}{87,892}} \right) \\ &= 0.4 * 0.68419 * (1 - 2.576 * .056906) \\ &= 0.4 * 0.68419 * (1 - 2.576 * 0.23855) \\ &= 0.4 * 0.68419 * 0.38549 \\ &= 0.1 \end{aligned}$$

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$$\begin{aligned}
 \text{Upper limit} &= 0.4 * 1.41047 * \left(1 + 2.576 \sqrt{0.670 * 0.000238 + \frac{7,486}{87,892}} \right) \\
 &= 0.4 * 1.41047 * (1 + 2.576 * .056906) \\
 &= 0.4 * 1.41047 * (1 + 2.576 * 0.23855) \\
 &= 0.4 * 1.41047 * 1.61451 \\
 &= 0.9
 \end{aligned}$$

This means that the chances are 95 out of 100 that the actual birth rate of Puerto Rican American women 45-49 years of age lies between 0.1 and 0.9.

Note: In the formulas above, the confidence limits are estimated from the nonsampling error in the number of births, the numerator, and the sampling error in the population estimate, the denominator. A 96 percent standard error is computed for the numerator and a 99 percent standard error is computed for the denominator in order to compute a 95 percent confidence interval for the rate.

Computing 95 percent Confidence Intervals for percents

In many instances we need to compute the confidence intervals for percents. Percents derive from a binomial distribution. As with birth rates, an asterisk will be shown for any percent which is based on fewer than 20 births in the numerator. We easily compute a 95-percent confidence interval for a percent when the following conditions are met:

$$\begin{aligned}
 B * p &\geq 5 \quad \text{and} \\
 B * q &\geq 5
 \end{aligned}$$

where:

$$\begin{aligned}
 B &= \text{number of births in the denominator} \\
 p &= \text{percent divided by 100} \\
 q &= 1 - p
 \end{aligned}$$

For natality data, these conditions will be met except for very rare events in small subgroups. If the conditions are *not* met, the variation in the percent will be so large as to render the confidence intervals meaningless. When these conditions are met the 95-percent confidence interval can be computed using the normal approximation of the binomial. The 95-percent confidence intervals are computed by the following formulas:

$$\text{Lower limit} = p - 1.96 * \sqrt{p * \frac{q}{B}}$$

$$\text{Upper limit} = p + 1.96 * \sqrt{p * \frac{q}{B}}$$

where:

$$\begin{aligned}
 B &= \text{number of births in the denominator} \\
 p &= \text{percent divided by 100}
 \end{aligned}$$

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$$q = 1 - p$$

Example

Suppose the percent of births to Hispanic women in Alabama that were to unmarried women was 23.0 percent. This was based on 310 births in the numerator and 1,345 births in the denominator. First we test to make sure we can use the normal approximation of the binomial:

$$\begin{aligned} 1,345 \times .230 &= 309 \\ 1,345 \times (1 - .230) &= 1,036 \\ 1,345 \times .770 &= 1,036 \end{aligned}$$

Both 309 and 1,036 are greater than 5 so we can proceed. The 95-percent confidence interval would be:

$$\begin{aligned} \text{Lower limit} &= 0.23 - 1.96 * \sqrt{0.23 * \frac{0.77}{1,345}} \\ &= 0.23 - 0.022 \\ &= 0.208 \text{ or } 20.8 \text{ percent} \\ \text{Upper limit} &= 0.23 + 1.96 * \sqrt{0.23 * \frac{0.77}{1,345}} \\ &= 0.23 + 0.022 \\ &= 0.252 \text{ or } 25.2 \text{ percent} \end{aligned}$$

This means that the chances are 95 out of 100 that the actual percent of births in Alabama to Hispanic women that are to unmarried women lies between 20.8 and 25.2 percent.

Significance testing

Both rates are based on 100 or more events

When both rates are based on 100 or more events, the difference between the two rates is considered statistically significant if it exceeds the statistic in the formula below. This statistic equals 1.96 times the standard error for the difference between two rates.

$$1.96 \sqrt{\frac{R_1^2}{N_1} + \frac{R_2^2}{N_2}}$$

where:

- R₁ = the first rate
- R₂ = the second rate

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N_1 = the first number of births
 N_2 = the second number of births

If the difference is **greater** than this statistic, then the difference would occur by chance less than 5 times out of 100. If the difference is **less** than this statistic, the difference might occur by chance more than 5 times out of 100. We say that the difference is not statistically significant at the 95-percent confidence level.

Example

Is the first birth rate for black women 40-44 years of age (1.08 per 1,000) significantly lower than the comparable rate for white women (1.55)? Both rates are based on more than 100 births (1,535 for black women and 14,108 for white women). The difference between the rates is $1.55 - 1.08 = .47$. The statistic is then calculated as follows:

$$\begin{aligned}
 & 1.96 \sqrt{\frac{1.08^2}{1,535} + \frac{1.55^2}{14,108}} \\
 &= 1.96 \times \sqrt{[(1.166/1,535 + 2.403/14,108)]} \\
 &= 1.96 \times \sqrt{(.00076+0.00017)} \\
 &= 1.96 \times \sqrt{.00093} \\
 &= 1.96 \times .03 \\
 &= .06
 \end{aligned}$$

The difference between the rates (.47) is greater than this statistic (.06). Therefore, the difference is statistically significant at the 95-percent confidence level.

Significance Testing for Hispanic Subgroups

Tables 6, 8, 9, and 14 in “Births: Final Data for 1999” and tables 1-4 and 1-12 in “Vital Statistics United States, volume 1 natality” showing birth and fertility rates based on population estimates derived from the U.S. Bureau of the Census’ Current Population Survey and adjusted to resident population control totals, the formula above would be substituted by the formula which follows.

When both rates are based on 100 or more events, the difference between the two rates is considered statistically significant if it exceeds the statistic in the formula below. This statistic equals 1.96 times the standard error for the difference between two rates.

$$1.96 * \sqrt{R_1^2 * \frac{1}{B_1} + \frac{a}{P_1} + R_2^2 * \frac{1}{B_2} + \frac{a}{P_2}}$$

If the difference is greater than this statistic, then the difference would occur by chance less than 5 times out of 100. If the difference is less than this statistic, the difference might occur by chance more than 5 times out of 100. We say that the difference is not statistically significant at the 95-percent confidence level.

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Example

Suppose the birth rate for Puerto Rican mothers 15-19 years of age (R_1) is 80.6, based on 11,978 births and an estimated population of 148,673, and the birth rate for Cuban mothers 15-19 years of age (R_2) is 27.1, based on 997 births and an estimated population of 36,782. Using the above formula, the z score is computed as follows:

$$1.96 * \sqrt{80.6^2 * \frac{1}{11,978} + 0.670 * 0.000238 + \frac{7,486}{148,673} + 27.1^2 * \frac{1}{997} + 0.670 * 0.000238 + \frac{7,486}{36,782}}$$

$$1.96 * \sqrt{6,496.36 * [0.000083486 + 0.670(0.000238 + 0.050352)] + 734.41 * [0.0010030 + 0.670(0.000238 + 0.20352)]}$$

$$1.96 * \sqrt{(6,496.36 * 0.033660) + (734.41 * 0.13720)}$$

$$1.96 * \sqrt{218.67 + 100.76}$$

$$1.96 * 17.87$$

$$= 35.03$$

Since the difference between the two rates of 53.5 is greater than the value above, the two rates are statistically significant at the 0.05 level of significance.

One of the rates is based on fewer than 100 cases

To compare two rates, when one or both of those rates are based on less than 100 cases, you first compute the confidence intervals for both rates. Then you check to see if those intervals overlap. If they **do** overlap, the difference is not statistically significant at the 95-percent level. If they **do not** overlap, the difference is indeed “statistically significant.”

Example

Is the first birth rate for American Indian women 40-44 years of age (.54 per 1,000) significantly lower than the comparable rate for white women (1.55)? The rate for American Indian women is based on 47 events whereas the rate for white women is based on 14,108 events. The rate for American Indian women is based on less than 100 events; therefore, the first step is to compute the confidence intervals for both rates.

	Lower Limit	Upper Limit
American Indian women	0.40	0.72
White women	1.52	1.58

These two confidence intervals do not overlap. Therefore, the first birth rate for American women 40-44 is significantly lower (at the 95-percent confidence level) than the comparable rate for white women.

Testing differences between two percents

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When testing the difference between two percents, both percents must meet the following conditions:

$$B \times p \geq \$5 \quad \text{and}$$

$$B \times q \geq \$5$$

where:

$$B = \text{number of births in the denominator}$$

$$p = \text{percent divided by 100}$$

$$q = 1 - p$$

When both percents meet these conditions then the difference between the two percents is considered statistically significant if it exceeds the statistic in the formula below. This statistic equals 1.96 times the standard error for the difference between two percents.

$$1.96 \sqrt{p(1-p) \left(\frac{1}{B_1} + \frac{1}{B_2} \right)}$$

$$p_1 - p_2 - \frac{B_1 p_1 + B_2 p_2}{B_1 B_2}$$

where:

$$B_1 = \text{the number of births in the denominator for the first percent}$$

$$B_2 = \text{the number of births in the denominator for the second percent}$$

$$p_1 = \text{the first percent divided by 100}$$

$$p_2 = \text{the second percent divided by 100}$$

Example

Is the percent of births to Hispanic women that were to unmarried women higher in Alaska (28.8 percent) than in Alabama (23.0). The number in the denominator was 593 in Alaska and 1,345 in Alabama. The necessary conditions are met for both percents (calculations not shown). The difference between the two percents is .288 - .230 = .058. The statistic is then calculated as follows:

$$1.96 \sqrt{(.2477) (.7523) (.0024)}$$

$$= 1.96 \times .00447$$

$$= 1.96 \times .021$$

$$= .042$$

The difference between the percents (.058) is greater than this statistic (.042). Therefore, the difference is

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statistically significant at the 95-percent confidence level.

Computation of rates and other measures

Population bases

The rates shown in this report were computed on the basis of population statistics prepared by the U.S. Bureau of the Census. Rates for 1940, 1950, 1960, 1970, 1980, and 1990 are based on the population enumerated as of April 1 in the censuses of those years. Rates for all other years are based on the estimated midyear (July 1) population for the respective years. Birth rates for the United States, individual States, and metropolitan areas are based on the total resident populations of the respective areas. Except as noted these populations exclude the Armed Forces abroad but include the Armed Forces stationed in each area. The resident population of the birth- and death-registration States for 1900-32 and for the United States for 1900-99 is shown in table 4-1. In addition, the population including Armed Forces abroad is shown for the United States. Table D shows the sources for these populations.

In both the 1980 and 1990 censuses, a substantial number of persons did not specify a racial group that could be classified as any of the White, Black, American Indian, Eskimo, Aleut, Asian, or Pacific Islander categories on the census form (26). In 1980 the number of persons of "other" race was 6,758,319; in 1990 it was 9,804,847. In both censuses, the large majority of these persons were of Hispanic origin (based on response to a separate question on the form), and many wrote in their Hispanic origin, or Hispanic origin type (for example, Mexican, Puerto Rican) as their race. In both 1980 and 1990, persons of unspecified race were allocated to one of the four tabulated racial groups (white, black, American Indian, Asian or Pacific Islander), based on their response to the Hispanic origin question. These four race categories conform with the 1979 edition of OMB Directive 15 which mandates that race data must contain at least these 4 categories. These categories are also more consistent with the race categories in vital statistics.

In the allocation of unspecified race was carried out using cross-tabulations of age, sex, race, type of Hispanic origin, and county of residence. Persons of Hispanic origin and unspecified race were allocated to either white or black, based on their Hispanic origin type. Persons of "other" race and Mexican origin were categorically assumed to be white, while persons in other Hispanic categories were distributed to white and black *pro rata* within the county-age-sex group. For "other-not-specified" persons who were not Hispanic, race was allocated to white, black, or Asian and Pacific Islander, based on proportions gleaned from sample data. The 20-percent sample (respondents who were enumerated on the longer census form) provided a highly detailed coding of race, which allowed identification of otherwise unidentifiable responses with a specified race category. Allocation proportions were thus established at the State level, which were used to distribute the non-Hispanic persons of "other" race in the 100-percent tabulations.

In 1990 the race modification procedure was carried out using individual census records. Persons whose race could not be specified were assigned to a racial category using a pool of "race donors," which was derived from persons of specified race and the identical response to the Hispanic origin question within the auspices of the same Census District Office. As in 1980, the underlying assumption was that the Hispanic origin response was the major criterion for allocating race. Unlike 1980, persons of Hispanic origin, including Mexican, could be assigned to any racial group, rather than white or black only, and the non-Hispanic component of "other" race was allocated primarily on the basis of geography (District Office), rather than detailed characteristic.

The means by which respondent's age was determined were fundamentally different in the two censuses; therefore, the problems that necessitated the modification were different. In 1980 respondents reported year of

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birth and quarter of birth (within year) on the census form. When census results were tabulated, persons born in the first quarter of the year (before April 1) had age equal to 1980 minus year of birth, while persons born in the last 3 quarters had age equal to 1979 minus year of birth.

In 1990 the quarter year of birth was not reported on the census form, so that direct determination of age from year of birth was impossible. In 1990 census publications age is based on respondents' direct reports of age at last birthday. This definition proved inadequate for postcensal estimates, because it was apparent that many respondents had reported their age at time of either completion of the census form or interview by an enumerator, which could occur several months after the April 1 reference data. As a result, age was biased upward. Modification was based on a respecification of age, for most individual respondents, by year of birth, with allocation to first quarter (persons aged 1990 minus year of birth) and last three quarters (aged 1989 minus year of birth) based on a historical series of registered births by month. This process partially restored the 1980 logic for assignment of age. It was not considered necessary to correct for age overstatement and heaping in 1990, because the availability of age and year of birth on the census form provided elimination of spurious year-of-birth reports in the census data before modification occurred.

Populations for 1999--The population of the United States by age, sex, race, and Hispanic origin is shown in the Census Bureau report United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1999. Washington, DC: U.S. Census Bureau. Internet release, April 11, 2000.
http://www.census.gov/population/estimates/nat_90s_1.html.

Populations for 1998--The population of the United States by age, sex, race, and Hispanic origin is shown in the Census Bureau report United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1998. Washington, DC: U.S. Bureau of the Census. Internet release, June 4, 1999.
<Http://www.census.gov/population/www/estimates/uspop.html>.

Populations for 1997--The population of the United States by age, sex, race, and Hispanic origin is shown in the Census Bureau report United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1997. PPL-91R. U.S. Bureau of the Census. Rounded populations are consistent with U.S. Bureau of the Census file NESTV97. Washington: U.S. Department of Commerce. 1998.

Populations for 1996--The population of the United States by age, sex, race, and Hispanic origin is shown in the Census Bureau report, United States population estimates by age, sex, race and Hispanic origin: 1990 to 1996. U.S. Bureau of the Census. PPL-57. Washington: U.S. Department of Commerce. 1997.

Populations for 1995--The population of the United States by age, sex, race, and Hispanic origin is shown in the Census Bureau report, United States population estimates by age, sex, race and Hispanic origin: 1990 to 1995. U.S. Bureau of the Census. Census file RESDO795, PPL-41. Washington: U.S. Department of Commerce. 1996.

Populations for 1994--The population of the United States by age, sex, race, and Hispanic origin is shown in the Census Bureau report, United States population estimates by age, sex, race and Hispanic origin: 1990 to 1994. U.S. Bureau of the Census. PPL-21. Washington: U.S. Department of Commerce. 1995.

Populations for 1993--The population of the United States by age, sex, race and Hispanic origin is tabulated from Census file RESO793.

Populations for 1992--The population of the United States by age, sex, race and Hispanic origin is tabulated from census file RESPO792.

Populations for 1991--The population of the United States by age, race, and sex is shown in *Current Population Reports*, Series P-25, Number 1095. Monthly population figures were published in *Current Population Reports*, Series P-25, Number 1097.

Populations for 1990--The population of the United States by age, race, and sex, and the population for each State is shown in *Current Population Reports*, Series P-25, Number 1095. The figures have been modified as described above. Monthly population figures were published in *Current Population Reports*, Series P-25, Number 1094.

Population estimates for 1981-89--Birth rates for 1981-89 (except those for cohorts of women) have been revised, based on revised population estimates that are consistent with the 1990 census levels, and thus may differ

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from rates published in volumes of *Vital Statistics of the United States* for these years. The 1990 census counted approximately 1.5 million fewer persons than had earlier been estimated for April 1, 1990. The revised estimates for the United States by age, race, and sex were published by the U.S. Bureau of the Census in *Current Population Reports*, Series P-25, Number 1095. Population estimates by month are based on data published in *Current Population Reports*, Series P-25, Number 1094 and unpublished data. Unpublished revised estimates for States were obtained from the U.S. Bureau of the Census.

Populations for 1980--The population of the United States by age, race, and sex, and the population for each State are shown in tables 4-2 and 4-3 of volume I, *Vital Statistics of the United States*, 1980. The figures by race have been modified as described above. Monthly population figures were published in *Current Population Reports*, Series P-25, Number 899.

Population estimates for 1971-79--Birth rates for 1971-79 (except those for cohorts of women) have been revised, based on revised population estimates that are consistent with the 1980 census levels, and thus may differ from rates published in volumes of *Vital Statistics of the United States* for these years. The 1980 census counted approximately 5.5 million more persons than had earlier been estimated for April 1, 1980 (27). The revised estimates for the United States by age, race, and sex were published by the U.S. Bureau of the Census in *Current Population Reports*, Series P-25, Number 917. Population estimates by month are based on data published in *Current Population Reports*, Series P-25, Number 899. Unpublished revised estimates for States were obtained from the U.S. Bureau of the Census.

Population estimates for 1961-69--Birth rates for 1961-69 are based on revised estimates of the population and thus may differ slightly from rates published before 1976. The revised estimates used in computing these rates were published in *Current Population Reports*, Series P-25, Number 519. The rates for 1961-64 are based on revised estimates of the population published in *Current Population Reports*, Series P-25, Numbers 321 and 324 and may differ slightly from rates published in those years.

Population estimates for 1951-59--Final intercensal estimates of the population by age, race, and sex and total population by State for 1951-59 are shown in tables 4-4 and 4-5 of volume I, *Vital Statistics of the United States*, 1966. Beginning with 1963 these final estimates have been used to compute birth rates for 1951-59 in all issues of *Vital Statistics of the United States*.

Net census undercounts and overcounts

The U.S. Bureau of the Census has conducted extensive research to evaluate the coverage of the U.S. population (including undercount, overcount, and misstatement of age, race, and sex) in the last five decennial censuses 1950, 1960, 1970, 1980, and 1990. These studies provide estimates of the national population, that were not enumerated or over enumerated in the respective censuses, by age, race, and sex (27-29). The report for 1990 (30) includes estimates of net under enumeration and over enumeration for age, sex, and racial subgroups of the national population, modified for race consistency with previous population counts as described in the section "Population bases."

These studies indicate that there are differential coverages in the censuses among the population subgroups; that is, some age, race, and sex groups are more completely enumerated than others. To the extent that these estimates of overcounts or undercounts are valid, that they are substantial, and that they vary among subgroups and geographic areas, census miscounts can have consequences for vital statistics measures (28). However, the effects of undercounts in the census are reduced to the extent that there is underregistration of births. If these two factors are of equal magnitude, rates based on unadjusted populations are more accurate than those based on adjusted populations because the births have not been adjusted for underregistration.

The impact of net census miscounts on vital statistics measures includes the effects on levels of the rates and effects on differentials among groups.

If adjustments were made for persons who were not counted in the census of population, the size of the denominators would generally increase and the rates would be smaller than without an adjustment. Adjusted rates for 1990 can be computed by multiplying the reported rates by ratios of the 1990 census-level population adjusted

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for the estimated net census miscounts, which are shown in table E. A ratio of less than 1.0 indicates a net census undercount and would result in a corresponding decrease in the rate. A ratio in excess of 1.0 indicates a net census overcount and would result in a corresponding increase in the rate.

Enumeration of white females in the childbearing ages was at least 97 percent complete for all ages. Among black women, the undercount ranged up to 5 percent. Generally, females in the childbearing ages were more completely enumerated than males for similar race-age groups.

If vital statistics measures were calculated with adjustments for net census miscounts for each of these subgroups, the resulting rates would have been differentially changed from their original levels; that is, rates for those groups with the greatest estimated overcounts or undercounts would show the greatest relative changes due to these adjustments. Thus the racial differential in fertility between the white and the "All other" population can be affected by such adjustments.

Cohort fertility tables

The various fertility measures shown for cohorts of women are computed from births adjusted for underregistration and population estimates corrected for under enumeration and misstatement of age. Data published after 1974 use revised population estimates prepared by the U.S. Bureau of the Census and have been expanded to include data for the two major racial groups. Heuser has prepared a detailed description of the methods used in deriving these measures as well as more detailed data for earlier years (31). These tables for current years are available at <http://www.cdc.gov/nchs/datawh/statab/unpubd/natalty/natab97.htm>.

Parity distribution--The percent distribution of women by parity (number of children ever born alive to mother) is derived from cumulative birth rates by order of birth. The percent of zero-parity women is found by subtracting the cumulative first birth rate from 1,000 and dividing by 10. The proportions of women at parities one through six are found from the following formula:

$$\text{Percent at N parity} = (\text{cum. rate, order N}) - (\text{cum. rate, order N} + 1) / 10$$

The percent of women at seventh and higher parities is found by dividing the cumulative rate for seventh-order births by 10.

Birth probabilities--birth probabilities indicate the likelihood that a woman of a certain parity and age at the beginning of the year will have a child during the year. Birth probabilities differ from central birth rates in that the denominator for birth probabilities is specific for parity as well as for age.

Total fertility rate

The total fertility rate is the sum of the birth rates by age of mother (in 5-year age groups) multiplied by 5. It is an age-adjusted rate because it is based on the assumption that there are the same number of women in each age group. The rate of 2,075.0 in 1999, for example, means that if a hypothetical group of 1,000 women were to have the same birth rates in each age group that were observed in the actual childbearing population in 1999, they would have a total of 2,075.0 children by the time they reached the end of the reproductive period (taken here to be age 55 years), assuming that all of the women survived to that age.

Seasonal adjustment of rates

The seasonally adjusted birth and fertility rates are computed from the X-11 variant of Census Method II (32). This method of seasonal adjustment used since 1964 differs slightly from the U.S. Bureau of Labor Statistics (BLS) Seasonal Factor Method, which was used for Vital Statistics of the United States, 1964. The fundamental technique is the same in that it is an adaptation of the ratio-to-moving-average method. Before 1964 the method of seasonal adjustment was based on the X-9 variant and other variants of Census Method II. A comparison of the Census Method II with the BLS Seasonal Factor Method shows the differences in the seasonal patterns of births to be

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negligible.

Computations of percents, percent distributions, and medians

Births for which a particular characteristic is unknown were subtracted from the figures for total births that were used as denominators before percents, percent distributions, and medians were computed. The percent of records with missing information for each item is shown by State in table A. The median number of prenatal visits also excludes births to mothers who had no prenatal care. Computations of the median years of school completed and the median number of prenatal visits were based on ungrouped data. The median age of mother is computed from birth rates in 5-year age groups which eliminates the effects of changes in the age composition of the childbearing population over time. The procedures for distributing not stated age of father in order to compute mean ages are described in the section "age of father." An asterisk is shown in place of any derived statistic based on fewer than 20 births in the numerator or denominator.

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Table B. Births by State of Occurrence and Residence for Births Occurring in the 50 States and the District of Columbia, 1999

Area	Occurrence	Residence
United States	3,963,465	3,959,417
Alabama	61,337	62,122
Alaska	9,843	9,950
Arizona	81,208	81,145
Arkansas	35,629	36,729
California	519,102	518,508
Colorado	62,387	62,167
Connecticut	43,253	43,310
Delaware	11,306	10,676
District of Columbia	14,655	7,522
Florida	197,153	197,023
Georgia	127,581	126,717
Hawaii	17,096	17,038
Idaho	19,413	19,872
Illinois	179,094	182,068
Indiana	86,211	86,031
Iowa	37,701	37,558
Kansas	38,231	38,782
Kentucky	52,829	54,403
Louisiana	67,419	67,136
Maine	13,393	13,616
Maryland	67,605	71,967
Massachusetts	81,767	80,939
Michigan	132,307	133,607
Minnesota	65,787	65,970
Mississippi	41,747	42,684
Missouri	77,371	75,432
Montana	10,747	10,785
Nebraska	24,210	23,907
Nevada	28,892	29,362
New Hampshire	13,684	14,041
New Jersey	110,992	114,105
New Mexico	26,870	27,191
New York State only	133,425	136,273
New York City only	123,713	119,339
North Carolina	114,885	113,795
North Dakota	8,879	7,639
Ohio	153,257	152,584
Oklahoma	47,908	49,010
Oregon	46,106	45,204
Pennsylvania	145,882	145,347
Rhode Island	13,223	12,366
South Carolina	52,594	54,948
South Dakota	10,673	10,524
Tennessee	82,963	77,803
Texas	352,970	349,245
Utah	47,261	46,290
Vermont	6,220	6,567
Virginia	93,293	95,469
Washington	79,062	79,586
West Virginia	21,376	20,728
Wisconsin	67,192	68,208
Wyoming	5,763	6,129
Occurrence in U.S. Territories or Foreign Countries	-	4,048
Puerto Rico	-	19
Virgin Islands	-	19
Guam	-	4
American Samoa	-	-
Northern Marianas	-	-
Canada	-	175
Cuba	-	-
Mexico	-	3,069
Remainder of world	-	762

- Quantity zero.

Table C. Lower and upper 95 percent and 96 percent confidence limit factors for a birth rate based on a Poisson variable of 1 through 99 births, B

B	$L(1- \alpha=.95,B)$	$U(1- \alpha=.95,B)$	$L(1- \alpha=.96,B)$	$U(1- \alpha=.96,B)$
1	0.02532	5.57164	0.02020	5.83392
2	0.12110	3.61234	0.10735	3.75830
3	0.20622	2.92242	0.18907	3.02804
4	0.27247	2.56040	0.25406	2.64510
5	0.32470	2.33367	0.30591	2.40540
6	0.36698	2.17658	0.34819	2.23940
7	0.40205	2.06038	0.38344	2.11666
8	0.43173	1.97040	0.41339	2.02164
9	0.45726	1.89831	0.43923	1.94553
10	0.47954	1.83904	0.46183	1.88297
11	0.49920	1.78928	0.48182	1.83047
12	0.51671	1.74680	0.49966	1.78566
13	0.53246	1.71003	0.51571	1.74688
14	0.54671	1.67783	0.53027	1.71292
15	0.55969	1.64935	0.54354	1.68289
16	0.57159	1.62394	0.55571	1.65610
17	0.58254	1.60110	0.56692	1.63203
18	0.59266	1.58043	0.57730	1.61024
19	0.60207	1.56162	0.58695	1.59042
20	0.61083	1.54442	0.59594	1.57230
21	0.61902	1.52861	0.60435	1.55563
22	0.62669	1.51401	0.61224	1.54026
23	0.63391	1.50049	0.61966	1.52602
24	0.64072	1.48792	0.62666	1.51278
25	0.64715	1.47620	0.63328	1.50043
26	0.65323	1.46523	0.63954	1.48888

Table C. Lower and upper 95 percent and 96 percent confidence limit factors for a birth rate based on a Poisson variable of 1 through 99 births, B

B	$L(1 - \alpha = .95, B)$	$U(1 - \alpha = .95, B)$	$L(1 - \alpha = .96, B)$	$U(1 - \alpha = .96, B)$
27	0.65901	1.45495	0.64549	1.47805
28	0.66449	1.44528	0.65114	1.46787
29	0.66972	1.43617	0.65652	1.45827
30	0.67470	1.42756	0.66166	1.44922
31	0.67945	1.41942	0.66656	1.44064
32	0.68400	1.41170	0.67125	1.43252
33	0.68835	1.40437	0.67575	1.42480
34	0.69253	1.39740	0.68005	1.41746
35	0.69654	1.39076	0.68419	1.41047
36	0.70039	1.38442	0.68817	1.40380
37	0.70409	1.37837	0.69199	1.39743
38	0.70766	1.37258	0.69568	1.39134
39	0.71110	1.36703	0.69923	1.38550
40	0.71441	1.36172	0.70266	1.37991
41	0.71762	1.35661	0.70597	1.37454
42	0.72071	1.35171	0.70917	1.36938
43	0.72370	1.34699	0.71227	1.36442
44	0.72660	1.34245	0.71526	1.35964
45	0.72941	1.33808	0.71816	1.35504
46	0.73213	1.33386	0.72098	1.35060
47	0.73476	1.32979	0.72370	1.34632
48	0.73732	1.32585	0.72635	1.34218
49	0.73981	1.32205	0.72892	1.33818
50	0.74222	1.31838	0.73142	1.33431
51	0.74457	1.31482	0.73385	1.33057
52	0.74685	1.31137	0.73621	1.32694

Table C. Lower and upper 95 percent and 96 percent confidence limit factors for a birth rate based on a Poisson variable of 1 through 99 births, B

B	$L(1- \alpha=.95,B)$	$U(1- \alpha=.95,B)$	$L(1- \alpha=.96,B)$	$U(1- \alpha=.96,B)$
53	0.74907	1.30802	0.73851	1.32342
54	0.75123	1.30478	0.74075	1.32002
55	0.75334	1.30164	0.74293	1.31671
56	0.75539	1.29858	0.74506	1.31349
57	0.75739	1.29562	0.74713	1.31037
58	0.75934	1.29273	0.74916	1.30734
59	0.76125	1.28993	0.75113	1.30439
60	0.76311	1.28720	0.75306	1.30152
61	0.76492	1.28454	0.75494	1.29873
62	0.76669	1.28195	0.75678	1.29601
63	0.76843	1.27943	0.75857	1.29336
64	0.77012	1.27698	0.76033	1.29077
65	0.77178	1.27458	0.76205	1.28826
66	0.77340	1.27225	0.76373	1.28580
67	0.77499	1.26996	0.76537	1.28340
68	0.77654	1.26774	0.76698	1.28106
69	0.77806	1.26556	0.76856	1.27877
70	0.77955	1.26344	0.77011	1.27654
71	0.78101	1.26136	0.77162	1.27436
72	0.78244	1.25933	0.77310	1.27223
73	0.78384	1.25735	0.77456	1.27014
74	0.78522	1.25541	0.77598	1.26810
75	0.78656	1.25351	0.77738	1.26610
76	0.78789	1.25165	0.77876	1.26415
77	0.78918	1.24983	0.78010	1.26223
78	0.79046	1.24805	0.78143	1.26036

Table C. Lower and upper 95 percent and 96 percent confidence limit factors for a birth rate based on a Poisson variable of 1 through 99 births, B

B	$L(1- \alpha=.95,B)$	$U(1- \alpha=.95,B)$	$L(1- \alpha=.96,B)$	$U(1- \alpha=.96,B)$
79	0.79171	1.24630	0.78272	1.25852
80	0.79294	1.24459	0.78400	1.25672
81	0.79414	1.24291	0.78525	1.25496
82	0.79533	1.24126	0.78648	1.25323
83	0.79649	1.23965	0.78769	1.25153
84	0.79764	1.23807	0.78888	1.24987
85	0.79876	1.23652	0.79005	1.24824
86	0.79987	1.23499	0.79120	1.24664
87	0.80096	1.23350	0.79233	1.24507
88	0.80203	1.23203	0.79344	1.24352
89	0.80308	1.23059	0.79453	1.24201
90	0.80412	1.22917	0.79561	1.24052
91	0.80514	1.22778	0.79667	1.23906
92	0.80614	1.22641	0.79771	1.23762
93	0.80713	1.22507	0.79874	1.23621
94	0.80810	1.22375	0.79975	1.23482
95	0.80906	1.22245	0.80074	1.23345
96	0.81000	1.22117	0.80172	1.23211
97	0.81093	1.21992	0.80269	1.23079
98	0.81185	1.21868	0.80364	1.22949
99	0.81275	1.21746	0.80458	1.22822

Table D. Sources for resident population and population including Armed Forces abroad: Birth- and death-registration States, 1900-1932, and United States, 1900-1999.

Year	Source
1999-----	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1999. Washington: U.S. Bureau of the Census. Internet release, Jan. 2, 2001. Http://www.census.gov/population/estimates/nation/intfile3-1.txt .
1998-----	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1998. Washington: U.S. Bureau of the Census. Internet release, June 4, 1999. Http://www.census.gov/population/www/estimates/uspop.html .
1997-----	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1997. PPL-91R. Rounded populations consistent with U.S. Bureau of the Census file NESTV97. Washington:U.S. Department of Commerce. 1998.
1996-----	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1996. PPL-57. Washington:U.S. Department of Commerce. 1997.
1995-----	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1995. Census file RESD0795, PPL-41. Washington:U.S. Department of Commerce. 1996.
1994-----	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1994. PPL-21. Washington:U.S. Department of Commerce. 1995.
1993-----	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1993. Census file RESO793. Washington:U.S. Department of Commerce. 1995.
1992-----	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1992. Census file RESPO792. Washington:U.S. Department of Commerce. 1994.
1991-----	U.S. Bureau of the Census, Unpublished data consistant with Current Population Reports, Series P-25, No. 1095, Feb. 1993.
1990-----	U.S. Bureau of the Census, Unpublished data from the 1990 census. 1990 CPH-L-74 and unpublished data consistent with Current Population Reports, Series P-25, No. 1095, Feb. 1993.
1989-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1057, Mar. 1990.
1988-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1045, Jan. 1990.
1986-87-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1022, Mar. 1988.
1985-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1000, Feb. 1987.
1984-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 985, Apr. 1986.
1983-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 965, Mar. 1985.
1982-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 949, May 1984.
1981-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 929, May 1983.
1980-----	U.S. Bureau of the Census, U.S. Census of Population: 1980, Number of Inhabitants, PC80-1-A1, United States Summary, 1983.
1971-79-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 917, July 1982.
1970-----	U.S. Bureau of the Census, U.S. Census of Population: 1970, Number of Inhabitants, Final Report PC(1)-A1, United States Summary, 1971.
1961-69-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 519, April 1974.
1960-----	U.S. Bureau of the Census, U.S. Census of Population: 1960, Number of Inhabitants, PC(1)-A1, United States Summary, 1964.
1951-59-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 310, June 30, 1965.
1940-50-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 499, May 1973.
1930-39-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 499, May 1973, and National Office of Vital Statistics, Vital Statistics Rates in the United States, 1900-1940, 1947.
1920-29-----	National Office of Vital Statistics, Vital Statistics Rates in the United States, 1900-1940, 1947.
1917-19-----	Same as for 1930-39.
1900-1916-----	Same as for 1920-29.

Table 4-2. Estimated Population of the United States, by Age, Race, and Sex: July 1, 1999

[Figures include Armed Forces stationed in the United States but exclude those stationed outside the United States.]

Age	All races			White			Black			American Indian			Asian and Pacific Islander		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All ages	272,690,813	133,276,559	139,414,254	224,610,797	110,336,291	114,274,506	34,862,169	16,557,186	18,304,983	2,397,426	1,186,745	1,210,681	10,820,421	5,196,337	5,624,084
Under 1	3,819,903	1,952,133	1,867,770	3,027,180	1,549,389	1,477,791	568,772	289,078	279,694	42,542	21,442	21,100	181,409	92,224	89,185
1-4 years	15,122,239	7,730,542	7,391,697	12,015,456	6,155,680	5,859,776	2,226,888	1,129,687	1,097,201	159,576	80,755	78,821	720,319	364,420	355,899
5-9 years	19,946,746	10,207,957	9,738,789	15,706,268	8,047,451	7,658,817	3,145,614	1,597,522	1,548,092	219,430	111,364	108,066	875,434	451,620	423,814
10-14 years	19,548,484	10,011,707	9,536,777	15,388,526	7,892,905	7,495,621	3,087,258	1,569,095	1,518,163	248,536	126,289	122,247	824,164	423,418	400,746
15-19 years	19,747,923	10,150,997	9,596,926	15,647,637	8,069,271	7,578,366	3,043,767	1,548,256	1,495,511	234,657	117,925	116,732	821,862	415,545	406,317
15-17 years	11,762,063	6,058,282	5,703,781	9,304,359	4,803,475	4,500,884	1,807,421	924,663	882,758	145,820	73,686	72,134	504,463	256,458	248,005
18-19 years	7,985,860	4,092,715	3,893,145	6,343,278	3,265,796	3,077,482	1,236,346	623,593	612,753	88,837	44,239	44,598	317,399	159,087	158,312
20-24 years	18,025,589	9,183,052	8,842,537	14,367,068	7,371,872	6,995,196	2,696,655	1,333,366	1,363,289	194,322	97,858	96,464	767,544	379,956	387,588
25-29 years	18,209,100	9,055,292	9,153,808	14,504,772	7,289,220	7,215,552	2,611,248	1,248,879	1,362,369	193,241	99,069	94,172	899,839	418,124	481,715
30-34 years	19,726,712	9,770,996	9,955,716	15,926,621	7,984,101	7,942,520	2,675,415	1,256,405	1,419,010	180,806	92,200	88,606	943,870	438,290	505,580
35-39 years	22,544,607	11,215,732	11,328,875	18,503,500	9,302,148	9,201,352	2,901,808	1,364,864	1,536,944	185,829	93,253	92,576	953,470	455,467	498,003
40-44 years	22,268,042	11,038,584	11,229,458	18,443,045	9,238,092	9,204,953	2,750,550	1,288,831	1,461,719	172,940	84,866	88,074	901,507	426,795	474,712
45-49 years	19,356,220	9,500,663	9,855,557	16,205,941	8,047,476	8,158,465	2,239,697	1,025,799	1,213,898	143,280	69,542	73,738	767,302	357,846	409,456
50-54 years	16,446,138	7,998,425	8,447,713	14,043,588	6,906,744	7,136,844	1,688,828	757,911	930,917	112,728	54,150	58,578	600,994	279,620	321,374
55-59 years	12,875,299	6,182,625	6,692,674	11,077,469	5,379,073	5,698,396	1,289,244	564,183	725,061	83,514	39,471	44,043	425,072	199,898	225,174
60-64 years	10,513,786	4,967,782	5,546,004	9,056,192	4,331,042	4,725,150	1,055,855	450,465	605,390	64,599	30,129	34,470	337,140	156,146	180,994
65-69 years	9,447,220	4,336,705	5,110,515	8,188,753	3,797,077	4,391,676	935,175	400,069	535,106	50,054	22,580	27,474	273,238	116,979	156,259
70-74 years	8,771,028	3,861,991	4,909,037	7,769,876	3,446,700	4,323,176	743,318	307,454	435,864	40,457	18,176	22,281	217,377	89,661	127,716
75-79 years	7,329,496	3,057,003	4,272,493	6,584,585	2,759,812	3,824,773	557,747	217,526	340,221	31,397	13,468	17,929	155,767	66,197	89,570
80-84 years	4,817,199	1,814,131	3,003,068	4,381,055	1,654,360	2,726,695	331,333	115,771	215,562	19,137	7,744	11,393	85,674	36,256	49,418
85 years +	4,175,082	1,240,242	2,934,840	3,773,265	1,113,878	2,659,387	312,997	92,025	220,972	20,381	6,464	13,917	68,439	27,875	40,564

SOURCE: Published and unpublished data from the U.S. Bureau of the Census; see text.

Table 4-3. Estimated Total Population and Female Population Aged 15-44 Years: United States, Each Division and State, Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas: July 1, 1999

Division and State	Total	Female 15-44 years
United States	272,690,813	60,107,320
New England	13,495,933	2,985,434
Maine	1,253,040	275,886
New Hampshire	1,201,134	276,157
Vermont	593,740	133,527
Massachusetts	6,175,169	1,383,500
Rhode Island	990,819	216,350
Connecticut	3,282,031	700,014
Middle Atlantic	38,334,029	8,324,400
New York	18,196,601	4,021,959
New Jersey	8,143,412	1,768,142
Pennsylvania	11,994,016	2,534,299
East North Central	44,442,146	9,830,575
Ohio	11,256,654	2,485,661
Indiana	5,942,901	1,318,926
Illinois	12,128,370	2,675,538
Michigan	9,863,775	2,201,144
Wisconsin	5,250,446	1,149,306
West North Central	18,800,138	4,077,775
Minnesota	4,775,508	1,054,543
Iowa	2,869,413	603,102
Missouri	5,468,338	1,197,857
North Dakota	633,666	133,290
South Dakota	733,133	155,395
Nebraska	1,666,028	358,971
Kansas	2,654,052	574,617
South Atlantic	49,560,021	10,906,909
Delaware	753,538	173,146
Maryland	5,171,634	1,191,034
District of Columbia	519,000	125,336
Virginia	6,872,912	1,601,592
West Virginia	1,806,928	379,123
North Carolina	7,650,789	1,684,358
South Carolina	3,885,736	884,147
Georgia	7,788,240	1,841,921
Florida	15,111,244	3,026,252
East South Central	16,582,841	3,720,245
Kentucky	3,960,825	884,631
Tennessee	5,483,535	1,225,260
Alabama	4,369,862	981,570
Mississippi	2,768,619	628,784
West South Central	30,325,593	6,744,879
Arkansas	2,551,373	542,905
Louisiana	4,372,035	991,196
Oklahoma	3,358,044	711,212
Texas	20,044,141	4,499,566
Mountain	17,127,479	3,693,701
Montana	882,779	180,369
Idaho	1,251,700	271,323
Wyoming	479,602	100,851
Colorado	4,056,133	891,205
New Mexico	1,739,844	376,584
Arizona	4,778,332	1,001,135
Utah	2,129,836	497,103
Nevada	1,809,253	375,131
Pacific	44,022,633	9,823,402
Washington	5,756,361	1,281,159
Oregon	3,316,154	697,905
California	33,145,121	7,462,555
Alaska	619,500	133,877
Hawaii	1,185,497	247,906
Puerto Rico	3,889,507	911,825
Virgin Islands	119,615	25,990
Guam	151,968	31,111
American Samoa	63,781	13,873
Northern Marianas	69,216	23,435

Table 4-4. Estimated Total Population and Female Population Aged 15-44 Years: United States, Each Division, State, and Territory: July 1, 1999

[Figures include Armed Forces stationed in each area and exclude those stationed outside the United States.]

Area	Total	Female 15-44 years	Area	Total	Female 15-44 years
United States	272,690,813	60,107,320			
Geographic divisions:			South Atlantic	49,560,021	10,906,909
New England	13,495,933	2,985,434	Delaware	753,538	173,146
Middle Atlantic	38,334,029	8,324,400	Maryland	5,171,634	1,191,034
East North Central	44,442,146	9,830,575	District of Columbia	519,000	125,336
West North Central	18,800,138	4,077,775	Virginia	6,872,912	1,601,592
South Atlantic	49,560,021	10,906,909	West Virginia	1,806,928	379,123
East South Central	16,582,841	3,720,245	North Carolina	7,650,789	1,684,358
West South Central	30,325,593	6,744,879	South Carolina	3,885,736	884,147
Mountain	17,127,479	3,693,701	Georgia	7,788,240	1,841,921
Pacific	44,022,633	9,823,402	Florida	15,111,244	3,026,252
New England	13,495,933	2,985,434	East South Central	16,582,841	3,720,245
Maine	1,253,040	275,886	Kentucky	3,960,825	884,631
New Hampshire	1,201,134	276,157	Tennessee	5,483,535	1,225,260
Vermont	593,740	133,527	Alabama	4,369,862	981,570
Massachusetts	6,175,169	1,383,500	Mississippi	2,768,619	628,784
Rhode Island	990,819	216,350	West South Central	30,325,593	6,744,879
Connecticut	3,282,031	700,014	Arkansas	2,551,373	542,905
Middle Atlantic	38,334,029	8,324,400	Louisiana	4,372,035	991,196
New York	18,196,601	4,021,959	Oklahoma	3,358,044	711,212
New Jersey	8,143,412	1,768,142	Texas	20,044,141	4,499,566
Pennsylvania	11,994,016	2,534,299	Mountain	17,127,479	3,693,701
East North Central	44,442,146	9,830,575	Montana	882,779	180,369
Ohio	11,256,654	2,485,661	Idaho	1,251,700	271,323
Indiana	5,942,901	1,318,926	Wyoming	479,602	100,851
Illinois	12,128,370	2,675,538	Colorado	4,056,133	891,205
Michigan	9,863,775	2,201,144	New Mexico	1,739,844	376,584
Wisconsin	5,250,446	1,149,306	Arizona	4,778,332	1,001,135
West North Central	18,800,138	4,077,775	Utah	2,129,836	497,103
Minnesota	4,775,508	1,054,543	Nevada	1,809,253	375,131
Iowa	2,869,413	603,102	Pacific	44,022,633	9,823,402
Missouri	5,468,338	1,197,857	Washington	5,756,361	1,281,159
North Dakota	633,666	133,290	Oregon	3,316,154	697,905
South Dakota	733,133	155,395	California	33,145,121	7,462,555
Nebraska	1,666,028	358,971	Alaska	619,500	133,877
Kansas	2,654,052	574,617	Hawaii	1,185,497	247,906
			Territories		
			Puerto Rico	3,889,507	911,825
			Virgin Islands	119,615	25,990
			Guam	151,968	31,111
			American Samoa	63,781	13,873
			Northern Marianas	69,216	23,435

Source: Published and unpublished data from the Bureau of the Census; see text.

Births: Final Data for 1999

by Stephanie J. Ventura, M.A.; Joyce A. Martin, M.P.H.; Sally C. Curtin, M.A.;
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Abstract

Objectives—This report presents 1999 data on U.S. births according to a wide variety of characteristics. Data are presented for maternal demographic characteristics including age, live-birth order, race, Hispanic origin, marital status, and educational attainment; maternal characteristics (medical risk factors, weight gain, tobacco and alcohol use); medical care utilization by pregnant women (prenatal care, obstetric procedures, complications of labor and/or delivery, attendant at birth, and method of delivery); and infant characteristics (period of gestation, birthweight, Apgar score, abnormal conditions, congenital anomalies, and multiple births). Also presented are birth and fertility rates by age, live-birth order, race, Hispanic origin, and marital status. Selected data by mother's State of residence are shown, as well as data on month and day of birth, sex ratio, and age of father. Trends in fertility patterns and maternal and infant characteristics are described and interpreted.

Methods—Descriptive tabulations of data reported on the birth certificates of the 3.96 million births that occurred in 1999 are presented.

Results—Overall birth and fertility rates changed less than 1 percent in 1999. Teenage birth rates fell 2 to 6 percent. The rate for women aged 20–24 years declined slightly, while rates for women in their late twenties and their thirties rose 2 to 3 percent each. The number of births to unmarried women, the birth rate, and the percent of births that were to unmarried women each rose 1 percent or less. Smoking by pregnant women overall dropped again, but rose among women aged 18–24 years. Improvements in prenatal care utilization continued. The cesarean delivery rate increased for the third year after declining for 7 consecutive years. The proportion of multiple births continued to rise; however, higher order multiple births (e.g., triplets, quadruplets) declined for the first time in over a decade, following increases of 13 percent per year during 1990–98. The percent low birthweight remained at 7.6 percent, while preterm births rose to 11.8 percent. These trends are in large part the result of increases in multiple births.

Keywords: births • birth certificate • maternal and infant health • birth rates • maternal characteristics

Highlights

Births in the United States increased less than 1 percent in 1999, to 3,959,417, the second consecutive increase following a 7-percent decline from 1990 to 1997. The **birth rate** declined slightly in 1999 to 14.5 births per 1,000 total population, matching the record low reached in 1997. The **fertility rate**, which relates births to the number of women of childbearing age, increased less than 1 percent to 65.9 births per 1,000 women aged 15–44 years.

Fertility rates for women in racial and Hispanic origin subgroups changed relatively little in 1999. Rates increased for non-Hispanic white, Asian or Pacific Islander (API), Puerto Rican, and Cuban women. Rates declined for non-Hispanic black, Mexican, and American Indian women. The variation in rates found for recent years continued in 1999. The fertility rate was highest for Mexican women (112 per 1,000) followed by rates for Puerto Rican, non-Hispanic black, American Indian and API women, which fell within a relatively narrow range (66 to 78 per 1,000). Rates were much lower for non-Hispanic white and Cuban women (58 and 51 per 1,000, respectively).

The birth rate for teenagers declined again in 1999, falling 3 percent to 49.6 births per 1,000 women aged 15–19 years. The rate

Acknowledgments

This report was prepared under the general direction of Mary Anne Freedman, Director of the Division of Vital Statistics (DVS). Nicholas F. Pace, Chief of the Systems, Programming, and Statistical Resources Branch (SPSRB), and Manju Sharma, Gail Parr, Steven Steimel, Jordan Sacks, Thomas D. Dunn, Joyce Arbertha, and Jaleh Mousavi of SPSRB provided computer programming support and statistical tables. Robert N. Anderson of the Mortality Statistics Branch and Lester R. Curtin of the Office of Research and Methodology contributed to the [Technical notes](#). T. J. Mathews of the Reproductive Statistics Branch coordinated content review, assisted by Brady Hamilton, Fay Menacker, and Melissa Park. Staff of the Data Acquisition and Evaluation Branch carried out quality evaluation and acceptance procedures for the State data files on which this report is based. The Registration Methods staff of DVS consulted with State vital statistics offices regarding the collection of birth certificate data. This report was edited by Demarius V. Miller, typeset by Jacqueline M. Davis, and the graphics produced by Jarmila G. Ogburn of the Publications Branch, Division of Data Services.

has declined 20 percent since 1991 (62.1) and is now at a record low. The birth rate for young teenagers 15–17 years fell 6 percent during 1998–99 to 28.7 per 1,000, also a record low. The rate for older teenagers 18–19 years declined 2 percent to 80.3. From 1991 to 1999, the rate for young teenagers dropped 26 percent, while the rate for older teenagers declined 15 percent. Although all population groups have experienced declines, the reductions in birth rates have been steepest for non-Hispanic black teenagers; rates fell by 22 to 38 percent. The teenage *pregnancy* rate has declined 19 percent in the 1990's, to 94.3 in 1997, reflecting concurrent declines in birth and abortion rates.

The **birth rate for women in their early twenties** declined slightly in 1999, falling to 111.0 per 1,000 women aged 20–24 years. The **rate for women aged 25–29** years increased 2 percent to 117.8 per 1,000. Birth rates for women in their twenties have changed relatively little since the early to mid-1970's.

Birth rates for women in their thirties increased to 89.6 per 1,000 aged 30–34 years, and to 38.3 per 1,000 aged 35–39 years, up 2 to 3 percent each. The rates for these age groups are at their highest in more than three decades. The **birth rate** for women aged 40–44 years increased again in 1999 to 7.4 per 1,000.

The **first birth rate** increased in 1999, to 26.6 first births per 1,000 women aged 15–44 years, the first increase in this rate since 1990. The **median age at first birth** increased to 24.5 years; the median has risen slowly but steadily since 1972 (22.0).

The **birth rate for unmarried women** increased slightly in 1999 to 44.4 births per 1,000 unmarried women aged 15–44 years. The number of births to unmarried women rose 1 percent to 1,308,560, the highest number ever reported. Most of this increase was linked to the rise in the number of unmarried women in the childbearing ages. The percent of all births that were to unmarried women increased to 33.0 percent in 1999, compared with 32.8 percent in 1998.

Cigarette smoking during pregnancy declined again in 1999, to 12.6 percent. The overall rate has fallen steadily since 1989. However, tobacco use by pregnant teenagers continued to increase in 1999, and the rates for women aged 20–24 years rose for the first time in a decade. Overall smoking rates remain lowest for non-Hispanic black, Hispanic, and Asian or Pacific Islander women. Infant birthweight is seriously compromised by maternal smoking: In 1999, 12.1 percent of births to smokers compared with 7.2 percent of births to nonsmokers weighed less than 2,500 grams (5 pounds, 8 ounces).

Women were slightly more likely to receive **timely prenatal care** in 1999, 83.2 percent began care in the first trimester of pregnancy, compared with 82.8 percent in 1998. The proportion of women with first trimester care has risen each year of the 1990's, for a total increase of 10 percent. Concurrently, the percent of women with late or no care has also improved for the decade, falling from 6.1 to 3.8 percent. Timely care has increased for all racial/ethnic groups between 1990 and 1999 with the largest gains (20 percent or more) reported for non-Hispanic black, American Indian, Hawaiian, Mexican, Puerto Rican, and Central and South American women.

The **rate of cesarean delivery** increased 4 percent between 1998 and 1999 to 22.0 percent; the 1999 rate is 6 percent higher than the recent low point in 1996 (20.7). This was the third consecutive year that the rate increased after falling each year during 1989–96. The **primary cesarean rate** in 1999 (15.5 per 100 live births to women who had no previous cesarean) was 4 percent higher than in 1998 and 6 percent

higher than in 1997 (14.6). The rate had declined each year between 1989 and 1996 and remained steady between 1996 and 1997. The rate of **vaginal birth after previous cesarean delivery (VBAC)** declined 11 percent between 1998 and 1999—from 26.3 per 100 women with a previous cesarean to 23.4. The VBAC rate dropped 17 percent between 1996 and 1999 after rising 50 percent between 1989 and 1996 (from 18.9 to 28.3). Births delivered by **forceps** continued to decline, to 2.3 percent of all births in 1999. After increasing steadily between 1989 and 1997, the percent of births delivered by **vacuum extraction** fell 18 percent between 1997 and 1999, to 5.1 percent.

Almost 20 percent of women who delivered in 1999 had **induced labor**, twice the 1990 level. The rate of induction has increased every year since 1989.

Twin births continued to rise in 1999, but for the first year in over a decade, **triplet and other higher order multiple births** (triplet/+) births declined. The number and rate of twin births was up 3 percent to 114,307 or 28.9 per 1,000 live births between 1998 and 1999. The twinning rate has risen by more than 50 percent since 1980. The number of triplet/+ births however, was down to 7,321 for 1999, from 7,625 in 1998; the triplet/+ birth rate declined 4 percent, from 193.5 to 184.9 per 100,000 live births. For 1998–99 the non-Hispanic white triplet/+ birth rate declined, but the rate increased among non-Hispanic black and Hispanic women. Since 1980, the number and rate of triplet/+ births has climbed from 1,337 and 37.0 per 100,000.

The rate of **preterm birth** (less than 37 completed weeks of gestation) increased again for 1999 to 11.8 percent from 11.6 percent in 1998. The percent of births born preterm has risen 11 percent since 1990 (10.6 percent). All of the current year rise, and most of that for the decade, has been among moderately preterm births (between 32 and 36 weeks of gestation). The proportion of births born very preterm was 1.96 percent; this level has fluctuated little since 1990. The preterm rate increased for non-Hispanic white births (10.2 to 10.5 percent for 1998–99), but was unchanged among non-Hispanic black (17.6 percent) and Hispanic births (11.4 percent).

The **low birthweight (LBW)** (less than 2,500 grams) rate was unchanged for 1999 at 7.6 percent. Low birthweight has been rising fairly steadily since the mid-1980's (6.8 percent), and has risen 9 percent since 1990 (7.0 percent). The percent **very low birthweight (VLBW)** (less than 1,500 grams) was unchanged from the previous year (1.45 percent), but has increased from 1.27 percent in 1990. LBW has risen substantially (18 percent) among non-Hispanic white births in the 1990's, but has declined slightly among births to non-Hispanic black mothers. The rise in LBW, especially among non-Hispanic white births, is influenced by the increased multiple birth rate; multiple births are much more likely than singletons to be low birthweight.

Introduction

This report presents detailed data on numbers and characteristics of births in 1999, birth and fertility rates, maternal lifestyle and health characteristics, medical services utilization by pregnant women, and infant health characteristics. These data provide important information on fertility patterns among American women by such characteristics as age, live-birth order, race, Hispanic origin, marital status, and educational attainment. Up-to-date information on these fertility patterns is critical to understanding population growth and

change in this country and in individual States. Data on maternal characteristics such as weight gain, tobacco and alcohol use, and medical risk factors are useful in accounting for differences in birth outcomes. Information on use of prenatal care, obstetric procedures, complications of labor and/or delivery, attendant at birth and place of delivery, and method of delivery by maternal demographic characteristics can also help to explain differences in birth outcomes. It is very important that data on birth outcomes, especially levels of low birthweight and preterm birth, be continuously monitored, because these variables are important predictors of infant mortality and morbidity.

A report of preliminary birth statistics for 1999 presented data on selected topics based on a substantial sample (more than 99 percent) of the 1999 birth file (1). Findings for the selected measures (age, race, Hispanic origin, and marital status of mother, live-birth order, prenatal care, cesarean delivery, and low birthweight) based on the preliminary data are very similar to those presented here based on final data.

In addition to the tabulations included in this report, more detailed analysis is possible by using the natality public-use data tape, which is issued for each year. Birth data are also available in CD-ROM format since 1990, and a selection of tables of detailed data are available on the NCHS home page at <http://www.cdc.gov/nchs/datawh/statab/unpubd/natality/natab97.htm> (2, 3).

Methods

Data shown in this report are based on 100 percent of the birth certificates registered in all States and the District of Columbia. More than 99 percent of births occurring in this country are registered (4). Tables that show data by State also provide separate information for Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas. However, these areas are not included in totals for the United States.

In this report, tabulations of births beginning with 1980 data are by race of mother; for years prior to 1980, tabulations are by race of child. Details of the differences in tabulation procedure are described in the [Technical notes](#). Text references to black births and black mothers or white births and white mothers are used interchangeably for ease in writing.

Race and Hispanic origin are reported independently on the birth certificate. In tabulations of birth data by race and Hispanic origin, data for Hispanic persons are not further classified by race because the vast majority of women of Hispanic origin are reported as white. Most tables in this report show data for these categories: white, total; white, non-Hispanic; black, total; black, non-Hispanic; and Hispanic. When data other than birth rates for Hispanic subgroups are shown, they are presented for the following five groups: Mexican, Puerto Rican, Cuban, Central and South American, and other (and unknown) Hispanic. When reporting birth rates for Hispanic subgroups, births to Central and South American women are added to births to other (and unknown) Hispanic women because more detailed population data for Central and South American women are not separately available. Data are shown for five Asian or Pacific Islander (API) subgroups: Chinese, Japanese, Hawaiian, Filipino, and "other" API. In addition, 11 States report data on API subgroups included in the "other API" category (Vietnamese, Asian Indian, Korean, Samoan, Guamanian, and remaining API); see [Technical notes](#).

U.S. and State-level birth and fertility rates in this report were computed on the basis of population denominators provided by the U.S. Bureau of the Census. Rates by State shown in this report may differ from rates computed on the basis of other population estimates. Additional information on the measurement of marital status, gestational age, and birthweight; the computation of derived statistics and rates; population denominators; random variation and relative standard error; and the definitions of terms are presented in the [Technical notes](#).

Information on births by age, race, or marital status of mother is imputed if it is not reported on the birth certificate. These items were not reported for less than 1 percent of U.S. births in 1999. (See [Technical notes](#) for additional information.) All other maternal and infant characteristics (except items on which length of gestation is calculated) are not imputed; see [Technical notes](#). Births for which a particular characteristic is unknown are subtracted from the figures for total births that are used as denominators before percents, percent distributions, and medians are computed. Thus, for example, the proportion of women receiving care in the first trimester of pregnancy is computed on the basis of births for which month prenatal care began was reported. Levels of nonreporting vary substantially by specific item and by State. [Table I](#) in the [Technical notes](#) provides information on the percent of records with missing information for each item by State for 1999. Readers should note that the levels of incomplete reporting for some of the medical items are quite high in some States. Data for Connecticut, Hawaii, and Oklahoma, as well as the Northern Marianas are of particular concern.

Demographic characteristics

Births and birth rates

Number of births

The number of births in the United States increased less than 1 percent in 1999, to 3,959,417, compared with 3,941,553 in 1998. This is the second year of increase, albeit very modest, in the number of births since 1990. Between 1990, the most recent high point in U.S. births, and 1997, the number of births fell 7 percent; the number rose 2 percent between 1997 and 1999 (see [tables 1–14 for national and State birth data by age, live-birth order, race, and Hispanic origin](#)).

Increases and declines in the **number of births for race and Hispanic origin groups** were about evenly split in 1999 ([tables 1 and 6](#)). The number of non-Hispanic white and non-Hispanic black births each fell about 1 percent. Births to American Indian, Puerto Rican, Cuban, and Hawaiian women were essentially unchanged. While births to Hispanic and Asian or Pacific Islander (API) women increased overall about 4 to 5 percent, these increases were concentrated among a few subgroups: Mexican and Central and South American births rose 5 percent each, Chinese births increased 3 percent, and "other" API births jumped 8 percent. In contrast Japanese and Filipino births declined 2 percent each.

Crude birth rate

The crude birth rate declined very slightly from 14.6 live births per 1,000 total population in 1998 to 14.5 in 1999, matching a record

low for the Nation (1997). During the 1990's the rate declined in all but one year (1998). Between 1990 and 1997, the rate fell 13 percent.

Fertility rate

The fertility rate, which relates births to the number of women in the childbearing ages, was 65.9 live births per 1,000 women aged 15–44 years in 1999, less than 1 percent higher compared with 1998 (65.6). While the steady 7-year downward trend in U.S. fertility from 1990 to 1997 may have ended, at least temporarily, there is no evidence for any real upturn. Like the number of births and the birth rate, the recent high point for the fertility rate was 1990 (70.9); between 1990 and 1997, the fertility rate dropped 8 percent (table 1 and figure 1).

Fertility rates by race and Hispanic origin increased very slightly for non-Hispanic white (57.8 per 1,000 aged 15–44 years) women and declined 1 percent for non-Hispanic black women (72.2). Rates for American Indian (69.7) and Mexican women (111.6) each declined by 1 percent or less. Rates for API (65.6), Puerto Rican (77.7), Cuban (51.2), and other Hispanic women (92.6) each rose 2 to 3 percent (tables 1 and 6). Birth and fertility rates for specific API groups cannot be computed because the necessary populations are not available.

The fertility rate for Hispanic women in 1999 was among the lowest reported since 1989 when data accounting for virtually all Hispanic births in the United States first became available. The fertility rate for Mexican women in 1999 is also at its lowest, 8 percent lower than the peak recorded in 1991 (121.6). Trends in fertility for Hispanic women by subgroup for 1989–95 are presented in more detail in a recent report (5).

Age of mother

Teenagers—Birth rates for teenagers fell to all-time lows in 1999. The **birth rate for the youngest teenagers** was 0.9 births per 1,000 females 10–14 years in 1999, a record low for this age group (table 4). This rate has declined steadily since 1994 (the rate was 1.4 in each year 1989 through 1994). The number of births to 10–14-

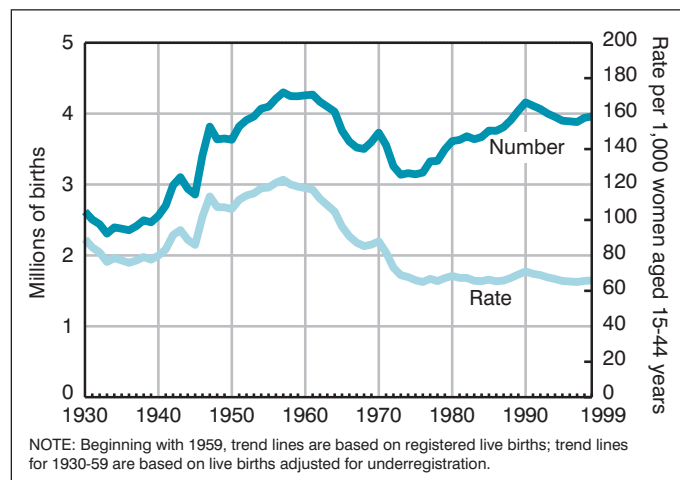


Figure 1. Live births and fertility rates: United States, 1930–99

year-olds fell 4 percent from 1998 to 1999, to 9,054, the lowest total reported in more than three decades (8,593 in 1967). The number of births to very young teenagers declined solely because the birth rate fell; the number of female teenagers has increased steadily in the 1990's and rose 2 percent from 1998 to 1999 (6).

The **birth rate for teenagers 15–19 years** fell 3 percent to 49.6 per 1,000, an all-time low for the Nation. This rate was 20 percent lower than the recent peak reported in 1991 (62.1) (table A). The declines in the 1990's in the teenage birth rate essentially reverse the 24-percent increase that occurred from 1986 (50.2 per 1,000) to 1991. State-specific birth rates for teenagers are discussed in the section "Births and birth rates by State."

Birth rates for teenage subgroups 15–17 and 18–19 years also fell between 1998 and 1999. The rate for teenagers 15–17 years declined 6 percent to 28.7 per 1,000, another record low (1,7). This rate fell by 26 percent from 1991 (38.7) to 1999 (table 4 and figure 2). The number of births to teenagers 15–17 years fell 3 percent from 1998 to 1999 to 163,588, the fewest in more than four decades.

The birth rate for older teenagers 18–19 years declined 2 percent, to 80.3 per 1,000. This rate fell 15 percent from 94.5 in 1992 (its recent high) to 1999 and is at its lowest point in more than a decade (79.9 in 1988). However, the number of births to older teens increased slightly between 1998 and 1999 to 312,462, only the second increase since 1990. This small increase is entirely due to the 2-percent rise in the number of female teenagers 18–19 years (6).

Table A. Birth rates for teenagers 15–19 years by age, race, and Hispanic origin of mother: United States, 1991, 1998, and 1999, and percent change, 1991–99

[Rates are live births per 1,000 women in specified group]

Year and age	Total ¹	Non-Hispanic		
		White	Black	Hispanic
15–19 years				
1999	49.6	34.0	83.7	93.4
1998	51.1	35.2	88.2	93.6
1991 ²	62.1	43.4	118.9	106.7
Percent change, 1991–99	–20	–22	–30	–12
Percent change, 1998–99	–3	–3	–5	–0
15–17 years				
1999	28.7	17.1	53.7	61.3
1998	30.4	18.4	58.8	62.3
1991 ²	38.7	23.6	86.7	70.6
Percent change, 1991–99	–26	–28	–38	–13
Percent change, 1998–99	–6	–7	–9	–2
18–19 years				
1999	80.3	58.9	126.8	139.4
1998	82.0	60.6	130.9	140.1
1991 ²	94.4	70.5	163.1	158.5
Percent change, 1991–99	–15	–16	–22	–12
Percent change, 1998–99	–2	–3	–3	–0

¹Includes races other than white and black and origin not stated.

²See reference 5 for information on reporting areas in 1991.

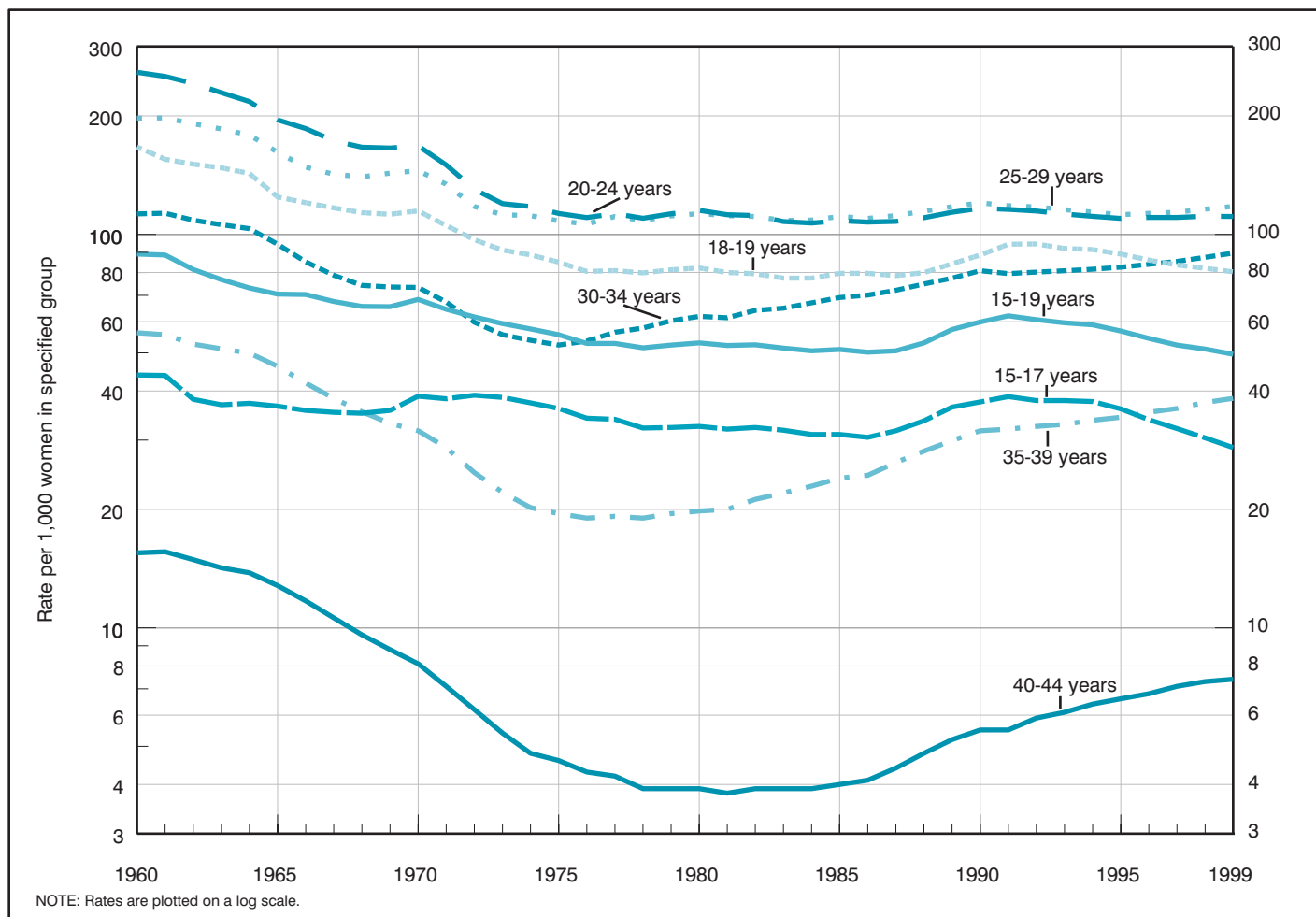


Figure 2. Birth rates by age of mother: United States, 1960–99

Teenage birth rates by race and Hispanic origin vary substantially (tables 3, 4, 8, and 9). Rates in 1999 were highest for Mexican, non-Hispanic black, Puerto Rican, and American Indian teenagers and lowest for non-Hispanic white, Cuban, and API teenagers, a pattern that has been observed since 1994. Despite the marked variation in rates (ranging from 22.3 to 101.5 per 1,000 aged 15–19 years), all population groups experienced notable declines in the 1990's. Between 1998 and 1999, teenage birth rates declined for all race and Hispanic origin groups except Cuban and "other" Hispanic teenagers. The rates for non-Hispanic white and API teenagers fell 3 percent each, while rates for non-Hispanic black and American Indian teenagers declined 5 to 6 percent each. The rates for Hispanic teenagers as a group and Mexican teenagers declined 1 percent or less.

From 1991, when rates for teenagers generally were at a peak, to 1999, birth rates fell 22 to 30 percent for non-Hispanic white and black teenagers, respectively. Despite the increase in the rate for Cuban teenagers, their rate remains one of the lowest among population subgroups. The 1999 rates for API and American Indian teenagers were 19 to 20 percent lower, respectively, than in 1991. The rate for Mexican teenagers, currently the highest of all groups, has declined by 19 percent just since 1995.

Teenage pregnancy rates (based on the sum of live births, induced abortions, and fetal losses) have also declined in recent years (8–10). The pregnancy rate for teenagers 15–19 years fell 19 percent

from 116.5 per 1,000 in 1991 to 94.3 in 1997, reversing an 11-percent rise from 1986 to 1991 (8, 9). (The most recent year for which pregnancy rates are available is 1997.) Further declines in the teenage pregnancy rate since 1997 are likely based on the sustained decline in the teenage birth rate.

The factors accounting for the current downturn in teenage pregnancy and birth rates are discussed in recent reports (7, 8). Briefly, the proportion of teenagers who are sexually experienced has stabilized in the mid 1990's, reversing the steady increases over the past two decades (11). Many public and private initiatives have focused teenagers' attention on the importance of pregnancy prevention through abstinence (12). Moreover, teenagers are more likely to use contraceptives at first intercourse, especially condoms (11, 13, and 14). Some sexually active teenagers have switched to implant and injectable contraceptives, which are effective new birth control methods (11).

Women aged 20 years and over: Women in their twenties—The birth rate for women aged 20–24 years declined very slightly in 1999 to 111.0 per 1,000. Since 1996, this rate has varied little, from 110 to 111 per 1,000. Earlier in the decade, the rate fell 5 percent from 116.5 in 1990 to 1996 (tables 4 and 9). The birth rate for women aged 25–29 years rose 2 percent in 1999 to 117.8, its highest level since 1992; this rate increased by 5 percent since 1995, following steady declines during 1990–95. Birth rates for women in their twenties, the principal childbearing ages, have been relatively stable over the

past two decades. In 1999 as in previous years, birth rates for women in age groups 20–24 and 25–29 years were consistently highest for Mexican women.

Women in their thirties—Birth rates for women in their thirties rose again in 1999. Rates for women in these age groups have generally increased steadily since the mid- to late 1970's, a pattern unlike any other age group ([tables 4 and 9](#)) (3, 15). The **rate for women aged 30–34 years** increased 3 percent in 1999 to 89.6 per 1,000. The 1999 rate was higher than in any year since 1965 (94.4), and 71 percent higher than the rate at its low point in 1975 (52.3) (3, 15). The pace of increase in the rate slowed in the 1990's to about 1 percent per year, compared with 3 percent annually during 1975–90. The number of births to women aged 30–34 years increased only slightly in 1999, because the number of women in that age group declined 2 percent (6).

The **birth rate for women in their late thirties** increased 2 percent to 38.3 per 1,000 women aged 35–39 years. This rate has more than doubled since 1978 (19.0); the 1999 rate matches the previous high point reached in 1967 (3). The pace of increase in the rate for women aged 35–39 years also slowed in the 1990's to about 2 percent annually compared with 4 percent per year from 1978 to 1990. Nevertheless, the 1999 rate was still 21 percent higher than the rate in 1990 (31.7). The number of births to women aged 35–39 years reached another record high in 1999 (434,294). During the 1990's, the number rose by more than one-third (317,583 in 1990). Among women in their thirties, birth rates were highest for API, Mexican, and "other" Hispanic women ([tables 3 and 8](#)).

Women in their forties—The **birth rate for women aged 40–44 years** increased from 7.3 per 1,000 in 1998 to 7.4 in 1999. This rate increased a third from 1990 (5.5) to 1999. From 1981 when the rate was at its lowest to 1999, the rate increased by 95 percent; the 1999 rate is higher than in any year since 1970 (8.1). From 1990 to 1999, the number of births in this age group rose 71 percent, from 48,607 to 83,090.

The **birth rate for women aged 45–49 years** remained unchanged at 0.4 births per 1,000 in 1998. Reflecting the continued increase in the number of women in this age group (who were born during 1950–54), the number of births to women aged 45–49 years rose 15 percent to 4,174, the highest number recorded in more than three decades (4,436 in 1966).

Births to women aged 50 years and over—Birth data for women aged 50–54 years are reported for the third consecutive year in 1999. These data were not available during 1964–96; for that period, mother's age was edited for ages 10–49 years (4). Additional information on the editing procedures is presented in the [Technical notes](#). Because of the recent advances in fertility-enhancing therapies, an increasing number of women are giving birth at age 50 and older. In 1999, 174 births were reported to women aged 50–54 years ([tables 2 and 7](#)); 68 of these births were part of a multiple delivery (see section below on "Multiple births"). This number is too small for computing an age-specific birth rate. Therefore, in computing birth rates by age of mother, births to women aged 50–54 years have been included with births to women aged 45–49 years; the denominator for the rate is women aged 45–49 years.

Birth rates for women in their late thirties and early forties increased in 1999 but at a more moderate pace, similar to that experienced earlier in the 1990's. Still the rates for these age groups are dramatically higher than a quarter century ago ([table 4](#)). The

sustained rise is linked to several factors, including the availability and use of fertility-enhancing therapies by childless couples. Among currently childless women aged 35–44 years reporting impaired fecundity according to the National Survey of Family Growth, the proportion seeking fertility drug treatment rose considerably from 1982 to 1995 (13, 16).

Live-birth order

The first birth rate in 1999 was 26.6 first births per 1,000 women aged 15–44 years ([table 5](#)), up slightly compared with 1998. The 1999 increase was the first since 1990. The 1999 rate was 8 percent lower than in 1990 (29.0), its recent high point. The rates for second and third order births also increased slightly. Birth rates for other birth orders were unchanged.

While the first birth rate increased about 1 percent overall, there were substantial differences in the trends by age of mother ([table 3](#); tabular data not shown for 1998 and earlier years). Rates declined for teenage subgroups 15–17 and 18–19 years by 6 and 1 percent, respectively. Rates for women in their twenties increased up to 1 percent. In contrast, first birth rates rose 4 and 2 percent, respectively, for women aged 30–34 and 35–39 years. The rate for women aged 40–44 years rose as well. Women aged 30 years and over accounted for 23 percent of all first births in 1999, the same proportion as in 1997 and in 1998, but dramatically higher than the 5 percent level reported in 1975 (15).

Another measure that can be useful in interpreting age trends in childbearing is the **median age at first birth**. The median age is the value that divides the birth rate distributions into two equal parts, one-half of the values being less and one-half being greater. This measure has gradually increased since the early 1970's as the tendency for women to postpone childbearing was underway. The median age at first birth inched up again in 1999 to 24.5 years, compared with 24.3 years in 1998, 23.8 in 1990, and 22.0 in 1972 (3). The **mean age at first birth** is also useful in reviewing age patterns in fertility; the mean age was 24.8 years in 1999, compared with 24.7 in 1997 and 1998.

The **birth rate for second births to teenagers** who have had a first birth changed very little in 1999, compared with 1997 and 1998, after falling 21 percent from 1991 to 1996 (6). All of the decline in teenage birth rates in 1999 was thus due to declines in first birth rates.

Total fertility rate

The total fertility rate (TFR) shows the potential impact of current fertility patterns on completed family size. The TFR indicates the number of births that a hypothetical group of 1,000 women would have if they experienced throughout their childbearing years the age-specific birth rates observed in a given year. Because it is computed from age-specific birth rates, the TFR is age-adjusted; it is not affected by changes over time in age composition.

The TFR in 1999 was 2,075.0, a scant 1 percent higher than in 1998 ([tables 4 and 9](#)). The TFR has increased by 3 percent overall since 1995, reversing a 3-percent decline from 1990 to 1995. The increase in the TFR in 1999 resulted from the 1- to 3- percent increases in age-specific birth rates for women in age groups 25–44 years, which more than compensated for the declines in birth rates for teenagers and women in their early twenties.

The U.S. TFR for 1999 was about 1 percent below “replacement” level (2,100), the rate at which a given generation can exactly replace itself. The TFR has been below “replacement” since 1971 (2,266.5). TFR’s vary substantially among racial and Hispanic origin groups. In 1999, as in recent years, the TFR was above “replacement” for Mexican, non-Hispanic black, Puerto Rican, and “other” Hispanic women. Rates were below “replacement” for American Indian, API, Cuban, and non-Hispanic white women (tables 4, 9, 13, and 14). Increases and decreases between 1998 and 1999 in most TFR’s were 1 percent or less; the rate declined 2 percent for American Indian women and rose 3 percent for API women. State-specific total fertility rates for 1999 are discussed in the next section.

Births and birth rates by State

Birth data by race and by Hispanic origin for 1999 are shown in tables 10–12 for the 50 States and the District of Columbia, and Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Northern Marianas. The American Indian, Asian or Pacific Islander (API), and Hispanic populations (and Hispanic subgroups) are highly concentrated geographically.

Increases and declines in the **number of births** were fairly evenly divided among the 50 States and the District of Columbia, and were generally 2 percent or less. The number of births rose 4 percent in Arizona, Colorado, and Georgia and fell 3 to 4 percent in Hawaii, New Hampshire, and North Dakota. Births fell 6 to 7 percent in the Virgin Islands, Guam, and the Northern Marianas and rose 3 percent in American Samoa.

Crude birth rates by State ranged from 11 births per 1,000 total population (Maine and Vermont) to 22 per 1,000 (Utah) (table 10). Birth rates increased in 14 States, declined in 29 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and the Northern Marianas, and were unchanged in 7 States and American Samoa. Changes were no greater than 2 percent in most States, and were not significant in 35 of the States and the District of Columbia. A statistically significant increase of 4 percent was recorded for South Dakota, while a significant decrease of 4 percent was found for New Hampshire.

Fertility rates per 1,000 women aged 15–44 years ranged from a low of 49 (Maine and Vermont) to a high of 93 (Utah) (table 10). Rates increased in 34 States, the Virgin Islands, and American Samoa, declined in 13 States, the District of Columbia, Puerto Rico, Guam, and the Northern Marianas; the rate was unchanged in three States. Changes in most States were no more than 2 percent and were not statistically significant in 31 States, the District of Columbia, the Virgin Islands, and American Samoa. Significant increases of 4 percent each were reported for Colorado and South Dakota.

State-specific **total fertility rates** (TFR’s) for 1999 are shown in table 10. These rates provide a summary measure of lifetime fertility at the State level; rates for 1980, 1990, and 1996–98 have been published (17–21). Rates by State for 1999 vary substantially, from a low of 1,570.0 (or 1.57 births per woman) for Vermont to a high of 2,745.5 (2.75 births per woman) for Utah. Differences in the TFR and changes between 1998 and 1999 by State are quite similar to those in the general fertility rate.

Birth rates for teenagers

Birth rates for teenagers by age group and State are shown for 1999 in table 10 and table B. Rates per 1,000 women aged 15–19 years ranged by State from 24.0 (New Hampshire) to 72.5 (Mississippi). The highest rate was reported for Guam, 96.6. Birth rates for teenagers have been declining in the United States since 1991. Teenage birth rates were lower in 1999 than in 1998 in all but seven States and American Samoa. However, the overall trend for the 1990’s was downward: Rates for 1999 were lower than for 1991 in all States, the District of Columbia, Puerto Rico, and the Virgin Islands; declines were statistically significant in all States, the District of Columbia, and the Virgin Islands. There was a nonsignificant increase in Guam (table B). Declines exceeded 30.0 percent in 5 States, and exceeded 25.0 percent in 9 States, the District of Columbia, and the Virgin Islands. More detailed information on current trends and variations in State-specific teenage birth rates by age, race, and Hispanic origin is presented in a recent report (7).

Sex ratio

The relative number of births by sex is important because it affects population change. There were 2,026,854 male live births in 1999 compared with 1,932,563 female live births yielding a sex ratio at birth of 1,049 males per 1,000 females, compared with 1,047 in 1998 (tables 13 and 14). The annual sex ratio has changed very little over the last 50 years. Nevertheless, substantial differences exist in the sex ratios by race and ethnic group (22). Similar to previous years, Asian or Pacific Islander mothers, as a group, had the highest sex ratio (1,064). The sex ratios for the Asian or Pacific Islander subgroups, excluding Hawaiian, exceeded 1,060. The sex ratio for Hispanic mothers (1,041), as a group, was intermediate between non-Hispanic white mothers (1,055) and non-Hispanic black mothers (1,032). Finally, American Indian mothers had the lowest sex ratio (1,029).

Month of birth

In 1999 August was the month with the most frequent occurrence of births while February was the month with the least frequent occurrence of births (table 15). The average number of births per month was 329,951. Standardizing the number of births for the number of days of the month, September had the highest average number of births per month. January had the lowest average number of births per month.

The observed monthly birth rates for 7 months of 1999 were below the rates for the same months in 1998. For 3 months, the birth rates were above those of the previous year. When seasonal variation is filtered from the monthly birth and fertility rates, an estimate of the underlying trends in these rates is obtained. The seasonally adjusted birth rates for 6 months were lower in 1999 than for the same months in 1998. Of these, December had the lowest seasonally adjusted birth rate in at least 4 years. As in 1998, the seasonally adjusted birth rates for January, May, and July were the lowest since 1976.

Table B. Birth rates for teenagers 15–19 years by State, 1991 and 1999, and percent change, 1991–99: United States and each State and territory

[Birth rates per 1,000 estimated female population aged 15–19 years in each area]

State	1991	1999	Percent change, 1991–99	State	1991	1999	Percent change, 1991–99
United States ¹	62.1	49.6	-20.1	Nebraska	42.4	37.0	-12.7
Alabama	73.9	62.8	-15.0	Nevada	75.3	64.1	-14.9
Alaska	65.4	41.8	-36.1	New Hampshire	33.3	24.0	-27.9
Arizona	80.7	69.6	-13.8	New Jersey	41.6	32.8	-21.2
Arkansas	79.8	68.1	-14.7	New Mexico	79.8	67.4	-15.5
California	74.7	50.7	-32.1	New York	46.0	37.0	-19.6
Colorado	58.2	48.4	-16.8	North Carolina	70.5	59.5	-15.6
Connecticut	40.4	33.3	-17.6	North Dakota	35.6	27.7	-22.2
Delaware	61.1	54.3	-11.1	Ohio	60.5	46.0	-24.0
District of Columbia	114.4	83.5	-27.0	Oklahoma	72.1	60.5	-16.1
Florida	68.8	53.5	-22.2	Oregon	54.9	46.5	-15.3
Georgia	76.3	65.1	-14.7	Pennsylvania	46.9	36.2	-22.8
Hawaii	58.7	43.8	-25.4	Rhode Island	45.4	38.2	-15.9
Idaho	53.9	43.7	-18.9	South Carolina	72.9	60.8	-16.6
Illinois	64.8	51.1	-21.1	South Dakota	47.5	37.6	-20.8
Indiana	60.5	51.6	-14.7	Tennessee	75.2	62.7	-16.6
Iowa	42.6	35.8	-16.0	Texas	78.9	70.1	-11.2
Kansas	55.4	47.4	-14.4	Utah	48.2	40.2	-16.6
Kentucky	68.9	56.4	-18.1	Vermont	39.2	25.7	-34.4
Louisiana	76.1	62.8	-17.5	Virginia	53.5	42.7	-20.2
Maine	43.5	29.8	-31.5	Washington	53.7	40.1	-25.3
Maryland	54.3	42.6	-21.5	West Virginia	57.8	47.9	-17.1
Massachusetts	37.8	28.7	-24.1	Wisconsin	43.7	35.7	-18.3
Michigan	59.0	40.5	-31.4	Wyoming	54.2	40.4	-25.5
Minnesota	37.3	30.0	-19.6	Puerto Rico	72.4	72.0	-0.6**
Mississippi	85.6	72.5	-15.3	Virgin Islands	77.9	55.2	-29.1
Missouri	64.5	49.6	-23.1	Guam	95.7	96.6	0.9**
Montana	46.7	35.1	-24.8	American Samoa	---	46.4	---
				Northern Marianas	---	62.0	---

** Not significant at $p < .05$.

--- Data not available.

¹Excludes data for the territories.

Day of the week of birth

The average number of births on any given day in 1999 was 10,848 (table 16). However, there was considerable variation in the number of births by day of the week. For the most frequent day of birth, Tuesday, the average was 12,424 while for the least frequent day, Sunday, the average was 7,731.

Variation in the daily pattern of births can also be measured by an index of occurrence. The index is defined as the ratio of the average number of births for a particular day of the week to the average daily number of births for the year with the base set at 100. In 1999 the index for Sunday was 71.3, an indication that there were 28.7 percent fewer births on Sundays than the daily average. The index for Saturday was 79.8. As in past years, Tuesdays had the highest index in 1999, 114.5.

A weekend deficit is apparent for vaginal and cesarean deliveries, but is far greater for cesarean deliveries, particularly repeat cesareans. In 1999 the Sunday index for vaginal births was 76.6, compared with 62.3 for primary cesareans, and 36.4 for repeat cesareans.

Births to unmarried women

The birth rate for unmarried women rose very slightly in 1999 to 44.4 births per 1,000 unmarried women aged 15–44 years, compared with 44.3 in 1998; the 1999 rate was still 5 percent lower than its highest level, 46.9 in 1994. The number of births to

unmarried women increased 1 percent to 1,308,560 in 1999. Most of the 4-percent increase in the number since 1997 is due to the concurrent 3-percent growth in the population of unmarried women (23). The percent of all births occurring to unmarried women rose to 33.0 in 1999 from 32.8 percent in 1998. (See tables C, 17, and 19.)

There were no changes in 1999 in the procedures for reporting the mother's marital status, a factor that affected trends earlier in the decade. Details of earlier changes in reporting practices are described in the Technical notes and elsewhere (24). In 1999 all States except for Michigan and New York reported the mother's marital status through a direct question on the birth certificate or in the electronic birth registration process. Michigan and New York inferred the mother's marital status on the basis of other information on the birth certificate; see Technical notes.

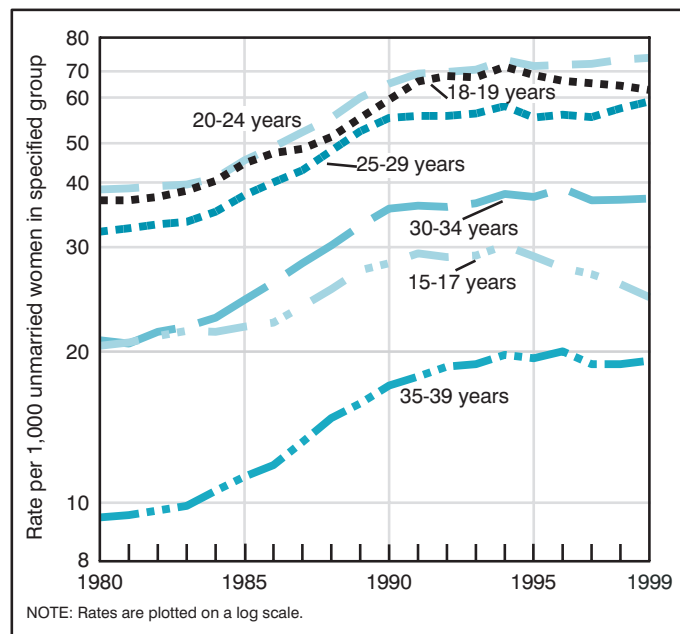
Birth rates for unmarried women vary considerably by race and Hispanic origin. In 1999 the rates per 1,000 unmarried women were 27.9 per 1,000 for non-Hispanic white women, 71.5 for black women, and 93.4 for Hispanic women. The birth rate for unmarried black women has declined steadily since 1989 (90.7), by 21 percent overall; the 1999 rate is at its lowest point since 1969 when data for black women became available (24). The birth rate for unmarried non-Hispanic white women was essentially stable in 1999, while the rate for Hispanic women rose 4 percent.

Table C. Number, rate, and percent of births to unmarried women, and birth rate for married women: United States, 1980 and 1985–99

Year	Births to unmarried women			Birth rate for married women ³
	Number	Rate ¹	Percent ²	
1999	1,308,560	44.4	33.0	86.5
1998	1,293,567	44.3	32.8	85.7
1997	1,257,444	44.0	32.4	84.3
1996	1,260,306	44.8	32.4	83.7
1995	1,253,976	45.1	32.2	83.7
1994	1,289,592	46.9	32.6	83.8
1993	1,240,172	45.3	31.0	86.8
1992	1,224,876	45.2	30.1	89.0
1991	1,213,769	45.2	29.5	89.9
1990	1,165,384	43.8	28.0	93.2
1989	1,094,169	41.6	27.1	91.9
1988	1,005,299	38.5	25.7	90.8
1987	933,013	36.0	24.5	90.0
1986	878,477	34.2	23.4	90.7
1985	828,174	32.8	22.0	93.3
1980	665,747	29.4	18.4	97.0

¹Births to unmarried women per 1,000 unmarried women aged 15–44 years.²Percent of all births to unmarried women.³Births to married women per 1,000 married women aged 15–44 years.

Birth rates for unmarried women by age continue to be highest for women aged 18–19 and 20–24 years, followed closely by women aged 25–29 years (figure 3). Rates for younger teenagers and women in age groups 30 years and over are considerably lower (tables 17 and 18). Among teenagers and women aged 20–24 years, rates for unmarried black and Hispanic women on average were 2 to 3 times the rates for non-Hispanic white women in the same age groups. Among age groups 25–29 years and over, rates were considerably higher for Hispanic women than for black or non-Hispanic white women.

**Figure 3. Birth rates for unmarried women, by age of mother: United States, 1980–99**

Age-specific birth rates for unmarried women declined only for teenagers in 1999, a pattern that has generally been observed since 1994. During the 1994–99 period, the rates for unmarried teenagers 15–17 and 18–19 years declined 20 and 10 percent, respectively. Since 1994, rates have fallen considerably for young black, non-Hispanic white, and Hispanic teenagers aged 15–17 years, by 31, 19, and 11 percent, respectively.

The birth rate for unmarried women aged 20–24 years rose about 1 percent, whereas the rate for women aged 25–29 years increased 3 percent. These increases brought the rates for women in their twenties to record highs in 1999. The birth rate for unmarried women aged 30–34 years rose less than 1 percent in 1999, while the rate for women in their late thirties increased 2 percent. The rate for women aged 40–44 years was unchanged in 1999. Increases for women in age groups 20–24 through 35–39 years were substantial for Hispanic women.

The **proportion of all births occurring to unmarried women** increased to 33.0 percent in 1999, compared with 32.8 percent in 1998. The proportions for subgroups in 1998 were 22.1 percent, non-Hispanic white; 69.1 percent, non-Hispanic black; and 42.2 percent, Hispanic; these proportions have risen since the mid 1990's for non-Hispanic white and Hispanic births, but have declined slightly for non-Hispanic black births (see tables 13, 14, 17, and 19 for 1999 data) (24).

Changes in the proportion of births to unmarried women are affected by trends in births and birth rates for married as well as unmarried women (table C). The proportion of births to unmarried women has changed relatively little since 1994 because of compensating changes in these measures as well as in the population of unmarried women (23). However, the increases in the number of unmarried women and their birth rate were larger than the increases in marital fertility. Thus, the proportion of births to unmarried women inched up again in 1999 (24).

The **numbers and proportions of births to unmarried women by State** and by race and Hispanic origin for 1999 are shown in table 19 for the 50 States and the District of Columbia, and each territory. Increases in the numbers and proportions far outpaced declines overall. The numbers increased in 36 States, and declined in 14 States and the District of Columbia. The numbers in the territories declined except for increases in Puerto Rico and American Samoa. The proportion increased in 33 States, Puerto Rico, Guam, American Samoa, and the Northern Marianas, declined in 14 States, the District of Columbia, and the Virgin Islands, and was unchanged in three States.

Age of father

The **birth rate per 1,000 men aged 15–54 years** was 50.8 in 1999 (table 20). This was slightly lower than the rate in the past year but higher than in 1997. Birth rates increased for men in age groups 25–44 years, remained stable for men in age groups 45 years and over, and decreased for men in the age groups under 25 years.

The mean age of fathers in 1999 was 29.7 years, essentially unchanged from 1997 and 1998 (tabular data not shown). In general, Asian or Pacific Islander fathers as a group were the oldest (32.6 years) with only 2 percent less than 20 years of age. The mean ages of non-Hispanic white fathers and black fathers were 30.9 and 29.0 years, respectively; 3 percent of white fathers and 7 percent of black fathers were teenagers. American Indian fathers were the youngest (28.3

years) with 8 percent less than 20 years of age. Finally, the mean age of Hispanic fathers was 28.4 years with 7 percent less than 20 years of age.

Information on age of father is often missing on birth certificates of children born to unmarried women and women less than 30 years of age (24). In 1999 age of father was not reported for 14 percent of all births but for 40 percent of all nonmarital births. In computing birth rates by age of father, births where age of father is not stated were distributed in the same proportion as births where age of father is stated within each 5-year age interval of mother. This procedure avoids the distortion in rates that would result if the relationship between age of mother and age of father were disregarded. The procedures for computing birth rates by age of father are described in more detail in the [Technical notes](#).

Educational attainment

The educational attainment of women who give birth is important because higher educational attainment is associated with more timely receipt of prenatal care and fewer lifestyle and health behaviors during pregnancy that are detrimental to birth outcome (discussed in later sections).

Data from the birth certificate show that the educational attainment of women who gave birth increased substantially over the last few decades, partly reflecting the increases in educational attainment of all women during the time period (25). More than three-fourths of women who gave birth in 1999 had 12 or more years of schooling (78 percent), and 24 percent had 16 or more years of formal schooling ([table 21](#)). The percent of mothers with at least 12 years of schooling generally increased over the range of age, to about 90 percent for women who gave birth in their thirties and then slightly decreased for mothers 40 years of age and over (89 percent). The percent of mothers with at least 16 years of formal schooling was highest for women 35 years of age and over (44 percent). The median educational attainment for all mothers in 1999 was 12.9 years.

In general, Japanese and Filipino mothers were the most likely to have completed 12 years of school—98 percent and 94 percent, respectively ([table 13](#)). Eighty-seven percent of non-Hispanic white mothers compared with 74 percent of non-Hispanic black mothers and 51 percent of Hispanic mothers had completed high school ([table 14](#)). Although the overall proportion of Hispanic mothers with at least 12 years of schooling was low, there was considerable variation among Hispanic subgroups, ranging from 45 percent of Mexican mothers to 88 percent of Cuban mothers. More than two-thirds of American Indian mothers had 12 or more years of schooling (68 percent). Finally, 31 percent of non-Hispanic white mothers had at least 16 years of school compared with 11 percent of non-Hispanic black mothers and 7 percent of Hispanic mothers.

Maternal lifestyle and health characteristics

Weight gain

Maternal weight gain is one of the components in the complex relationship between lifestyle characteristics of the mother and the development of the fetus (26). In 1990 the National Academy of Sciences published weight-gain guidelines that varied according to mother's body mass index (BMI), which is calculated from her

prepregnancy weight and height. The guidelines recommend that women who are underweight (low BMI) gain 28 to 40 pounds, those who are of normal weight (average BMI) gain 25 to 35 pounds, those who are overweight (high BMI), gain 15 to 25 pounds, and obese women, gain not more than 15 pounds (27).

Information on maternal weight gain is collected on the birth certificate, but information on the mother's prepregnancy weight and height is not. Therefore, it is not possible to determine whether the weight gain was within the recommendations for the mother's BMI. Differences between subgroups in maternal weight gain may reflect differences in the proportion of mothers who gained outside the recommended range but could also be the result of group differences in maternal height and prepregnancy weight.

In 1999 all States except California reported information on weight gain. Births to mothers residing in these States accounted for 87 percent of all births in the United States. In 1999, the majority of women (64 percent) gained 26 pounds or more during pregnancy ([table 22](#)). The **median weight gain** in 1999 was 30.5 pounds and it has changed very little in the last 10 years. Despite the consistency of the median weight gain, the percent of mothers who gained at either end of the weight gain spectrum was higher in 1999 than in 1989—weight gains of less than 16 pounds increased from 9.4 percent in 1989 to 11.8 percent in 1999 while weight gains of 46 pounds or more increased from 9.1 percent in 1989 to 12.0 percent in 1999.

The **weight gain of the mother during pregnancy varied considerably by period of gestation**. Mothers who had preterm infants (gestations of under 37 completed weeks) gained 3 pounds less during pregnancy (27.9 pounds) than mothers who had babies with gestations of 40 weeks and over (30.9 pounds). The median weight gain for non-Hispanic white women (30.8 pounds) was about a pound higher than for either non-Hispanic black women (30.0 pounds) or Hispanic women (29.8 pounds).

The percent of non-Hispanic black mothers who had weight gains of less than 16 pounds (17.1 percent) was much higher than for Asian or Pacific Islander (API) (9.7 percent) and non-Hispanic white mothers (10.2 percent) while American Indian mothers were intermediate (15.9 percent) ([tables 24 and 25](#)).

Within Hispanic subgroups, the percent of Mexican mothers who gained less than 16 pounds (15.0 percent) was more than twice that of Cuban mothers (7.1 percent) while the remaining groups were intermediate ([table 25](#)).

Maternal weight gain has been shown to have a positive correlation with the birthweight of the infant (28). This relationship is substantiated by the data in [table 23](#). The percent of infants with low birthweight dropped steadily with increasing weight gain through 36 to 40 pounds, from 13.9 to 5.2 percent, remained steady at 5.2 percent for women who gained 41 to 45 pounds, and then increased slightly for mothers who gained 46 pounds or more (5.5 percent). The general decline in the percent low birthweight with greater maternal weight gain is present for non-Hispanic white, non-Hispanic black, and Hispanic women regardless of the period of gestation.

Medical risk factors

Maternal medical risk factors have a major influence on pregnancy complications and infant survival (29–31). Some of these conditions require close medical supervision to prevent severe complications. Sixteen medical risk factors that can affect pregnancy outcome are separately identified on the birth certificate ([table 26](#)).

In 1999 the most frequently reported medical risk factors were **pregnancy-associated hypertension** (38.2 per 1,000 live births), **diabetes** (27.3) and **anemia** (23.2) ([table 26](#)). These have been the most frequently reported risk factors since 1990, and their rates have risen steadily. Pregnancy-associated hypertension increased by 40 percent; the rates for diabetes and anemia increased by 28 and 27 percent, respectively. The pregnancy-associated hypertension rate rose among the majority of racial and ethnic groups during the 1990's. Rates for the related hypertensive disorders, **chronic hypertension** and **eclampsia**, have been relatively stable during this decade.

Overall, and for the majority of racial and ethnic groups, the reported rate of **hydramnios/oligohydramnios** (the excess or shortage of amniotic fluid) has consistently increased each year since 1990, and has more than doubled between 1990 and 1999 (from 5.9 to 13.5 per 1,000). These conditions have been associated with diabetes (32, 33). Acute or chronic **lung disease** (e.g., asthma, tuberculosis) has exhibited an even more dramatic upward trend. Although lung disease is reported in only 1 percent of all pregnant women, the level of lung disease has more than tripled overall between 1990 and 1999 (from 3 to 11 per 1,000).

Medical risk factors during pregnancy vary greatly by **race and ethnicity** ([tables 27 and 28](#)). Since 1992, American Indian women have consistently had the highest rates of pregnancy-associated hypertension, diabetes, and anemia, comprising about 5 percent of all American Indian pregnancies for each condition. In comparison, during the same time period, only about 1 percent of Chinese mothers had pregnancy-associated hypertension or anemia. Among the Hispanic subgroups, in 1999 Cuban mothers had the lowest rates of anemia and diabetes (1 and 2 percent each, respectively).

Medical risk factor rates also often differ widely by maternal age ([table 26](#)). Anemia, for example, is more common among younger mothers (33 per 1,000 for mothers under 20 years of age compared with 18 for mothers 40 years of age and over). Older mothers, conversely, are more prone to chronic conditions such as diabetes (65 per 1,000 for mothers 40 years and over compared with 8 per 1,000 for mothers under 20 years of age). Some risk factors, however, such as pregnancy-associated hypertension, follow a U-shaped pattern, with the highest levels at the extremes of the maternal age distribution.

Rates for rarely occurring medical risk factors and for smaller population groups can vary widely from year-to-year and should be used with caution. Some of the apparent increases since 1990 may be an artifact of improved reporting. Other issues to be considered in evaluating the completeness of reporting include the diversity of the risk factors, their temporal and causal sequence in the pregnancy, and factor specific underreporting (34, 35). Medical risk factors may be incorrectly reported due to lack of uniform definitions and difficulty in interpreting data from medical records (36).

Tobacco use during pregnancy

Smoking during pregnancy declined again to 12.6 percent of women giving birth in 1999, according to birth certificate data. This was a 2-percent drop compared with 1998 (12.9 percent), and a 35-percent reduction since 1989 (19.5 percent), when this information first became available on the birth certificate (21, 37). Beginning in 1999, data on whether or not the mother smoked during pregnancy is available for all States and the District of Columbia, except for California and South Dakota. This reporting area comprised 87

percent of U.S. births in 1999. (See [tables 24, 25, and 29–32](#).) Additional information on the reporting areas is included in the [Technical notes](#).

Some studies have suggested that smoking may be underreported on birth certificates due to a variety of factors, including the lack of a specific time reference for smoking status, variations in the source of this information for each birth, and the growing stigma associated with smoking (37–40). Nevertheless, trends in maternal smoking based on the birth certificate are generally consistent with those reported for recent years from the National Survey of Family Growth and more recently from CDC's Behavioral Risk Factor Surveillance Summary, and variations in smoking among population subgroups found in birth certificate data have been corroborated in other studies (13, 41–43).

Tobacco use during pregnancy is associated with a variety of adverse outcomes, including increased risk of miscarriage, intrauterine growth retardation, low birthweight, and infant mortality, as well as negative consequences for child health and development (44–47).

Maternal smoking declined or was unchanged in all racial and Hispanic origin groups. As in previous years, rates were highest for non-Hispanic white, American Indian, and Hawaiian women, and lowest for Mexican, Cuban, Central and South American, and Asian or Pacific Islander women (API) (except Hawaiian) ([tables 24 and 25](#)). The generally very low smoking rates found for Mexican, Central and South American, Chinese, and Filipino women from birth certificate data have been confirmed elsewhere (42). Smoking rates tend to be dramatically higher for women born in the 50 States and the District of Columbia than for women born outside these areas, a pattern that has been described in other studies ([tables 24 and 25](#)) (48, 49).

Maternal smoking among teenagers rose about 2 percent overall, the fifth consecutive year of increase, with all of the 1998–99 increase confined to older teenagers (up from 19.2 to 19.5 percent) ([figure 4](#)) (37). Between 1994 and 1996, smoking rates rose for younger teenagers 15–17 years as well as older teenagers. Since 1996, rates for young teenagers have been stable, whereas rates for older teenagers have risen 7 percent.

Smoking rates increased among non-Hispanic white and black teenagers 15–19 years in 1999; the rate for Hispanic teenagers declined to 4.6 percent. The smoking rate for non-Hispanic black teenagers was 7.2 percent in 1999, compared with 5.0 percent in 1994 when the rate began to rise (see [table 30](#) for 1999 data.) The rate for non-Hispanic white teenagers increased to 30.1 percent; their rates were 4 to 5 times the rates for non-Hispanic black teenagers. Non-Hispanic white women aged 18–19 years had the highest smoking rate of any group, 30.7 percent, but the rate for younger non-Hispanic white teenagers was nearly as high, 28.7 percent ([table 30](#)).

The increase over the period 1994–99 in smoking among teenagers, especially older teenagers, has begun to impact rates for women in their early twenties, as older teenagers have turned 20 years and over. **Smoking rates for women aged 20–24 years increased in 1999** for the first time since this information first became available in 1989. Overall, the rate rose 1 percent to 16.7 percent, with increases measured for non-Hispanic white and black women, and Puerto Rican and Cuban women. The rate declined for Mexican women.

Smoking during pregnancy generally declined for women in age groups 25–54 years. Patterns of smoking rates and trends by age, race, and Hispanic origin are described in detail elsewhere (37).

Among smokers, **the proportion smoking at least half a pack of cigarettes daily** has declined steadily in recent years—to 30 percent

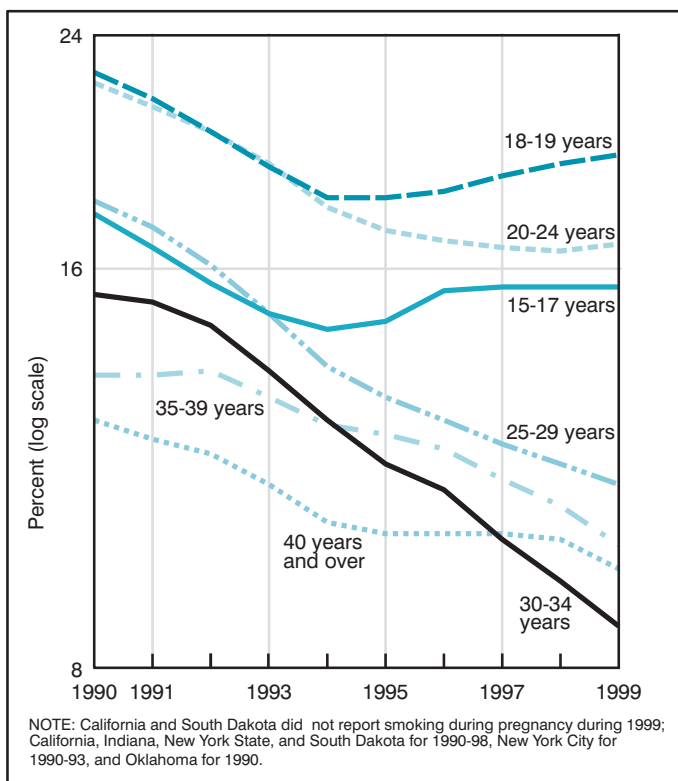


Figure 4. Percent of mothers who smoked during pregnancy by age: Total reporting areas, 1990-99

in 1999 (compared with 42 percent in 1990) (37). Information on the number of cigarettes smoked daily was reported in a comparable manner on the birth certificates of 46 States, the District of Columbia and New York City in 1999, comprising 81 percent of U.S. births. Non-Hispanic white mothers and older mothers are more likely than other mothers to smoke half a pack or more (tables 29 and 31).

Smoking rates by maternal educational attainment continue to be highest for women with 9-11 years of education, 26 percent in 1999, and lowest for women with 4 years or more of college, 2 percent (table 31). Even among women aged 20 years and over, smoking rates were highest for mothers who attended but did not graduate from high school—29 percent overall and 48 percent of non-Hispanic white women (tabular data not shown).

Babies born to mothers who smoke during pregnancy are at greatly elevated risk of low birthweight (LBW), a finding documented in birth certificate data as well as in numerous other studies (44, 51). In 1999, 12.1 percent of infants born to smokers weighed less than 2,500 grams (5 lb 8 oz) compared with 7.2 percent of births to nonsmokers (table 32). This substantial differential is found for every race and Hispanic origin group. Heavier smoking heightens the LBW risk, although LBW is elevated even among babies born to the lightest smokers (1 to 5 cigarettes daily), 11.1 percent (tabular data not shown) (50). Advancing maternal age exacerbates the risk, probably a consequence of the much greater cigarette consumption among older women (table 29).

Alcohol use during pregnancy

Pregnancy and birth outcome can be jeopardized by maternal alcohol use during pregnancy. Even low to moderate alcohol use has

been shown to jeopardize birth outcome, independent of other risk factors such as tobacco use and other maternal risk factors (52, 53). All States except California and South Dakota included items on alcohol use on their birth certificates in 1999. This reporting area accounted for 87 percent of U.S. births.

Alcohol use during pregnancy is substantially underreported on the birth certificate according to studies of birth certificate reporting and related surveys of pregnant women (34, 41). According to birth certificate data, alcohol use declined again in 1999 to just 1.0 percent of mothers reporting any alcohol use compared with 1.1 percent in 1998 and 4.1 percent in 1989, the first year this information was reported on the birth certificates (see tables 24 and 25 for 1999 data). A study based on an analysis of responses by about 1,300 pregnant women in the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System found that about 15 percent of women used alcohol during pregnancy in 1995. The researchers also reported that although alcohol use declined from 1988 (23 percent) to 1992 (10 percent), there was a statistically significant rise to 15 percent in 1995 (54).

The nature of the birth certificate questions on alcohol use apparently has contributed to the underreporting because the questions focus on the number of drinks per week, whereas other studies inquire about drinks per month (54). Women who drink, but less than one drink per week, may report no alcohol use for the birth certificate question. The stigma associated with alcohol use also contributes to the underreporting (26, 54).

Medical services utilization

Prenatal care

The percent of women who began prenatal care in the first trimester of pregnancy rose slightly for 1998-99, from 82.8 to 83.2. Following a decade of little progress, the proportion of women entering care within the first 3 months of pregnancy has risen each year in the 1990's. (See table D and tables 33-35 for 1999 data.) In 1999, 3.8 percent of all mothers received late or no care ("late care" is prenatal care beginning in the third trimester), compared with

Table D. First trimester prenatal care by race and Hispanic origin of mother: United States, 1980, 1985, 1990-99

Year	All races ¹	Non-Hispanic		Hispanic ²
		White	Black	
1999	83.2	88.4	74.1	74.4
1998	82.8	87.9	73.3	74.3
1997	82.5	87.9	72.3	73.7
1996	81.9	87.4	71.5	72.2
1995	81.3	87.1	70.4	70.8
1994	80.2	86.5	68.3	68.9
1993	78.9	85.6	66.1	66.6
1992	77.7	84.9	64.0	64.2
1991	76.2	83.7	61.9	61.0
1990	75.8	83.3	60.7	60.2
1989	75.5	82.7	59.9	59.5
1985	76.2	---	---	---
1980	76.3	---	---	---

--- Data not available.

¹Includes races other than white and black and origin not stated.

²Includes all persons of Hispanic origin of any race.

3.9 percent in 1998. The percent of women with late or no care has fallen from 6.1 percent since 1990. The benefits of prenatal care to pregnancy outcome are difficult to measure (55, 56), but appropriate care can promote healthier pregnancies by managing preexisting medical conditions, providing health behavior advice, and assessing the risk of poor pregnancy outcome (57).

Small gains in timely care were reported between 1998 and 1999 for the three largest racial and ethnic groups: non-Hispanic white (from 87.9 to 88.4 percent), non-Hispanic black (from 73.3 to 74.1 percent), and Hispanic women (from 74.3 to 74.4 percent), and for most subgroups. Whereas substantial improvements in care have been observed among all groups during the 1990's, improvement has been most pronounced for groups with lower levels of timely care. Between 1990 and 1999, levels of first trimester care rose by 20 percent or more among non-Hispanic black, American Indian, Hawaiian, Mexican, Puerto Rican, and Central and South American women. (See tables E, 24, and 25.) The larger gains for these groups have resulted in some narrowing of the prenatal care gap, but large differences among groups persist.

Of the 50 States and the District of Columbia, women living in New England had the highest levels of prenatal care utilization for 1999. At least 87 percent of women who gave birth in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont received care in the first trimester; less than 3 percent of New England residents received late or no care (table 34).

The Adequacy of Prenatal Care Utilization Index (APNCU) is an alternative measure of prenatal care utilization developed to adjust for some of the weaknesses of the month care began and the Kessner Index (58, 59). The APNCU is based on the month that prenatal care began and the number of prenatal visits, adjusting for gestational age. For 1999 the APNCU shows an appreciable rise in the percent of women with intensive use of care (women for whom the number of visits exceeded the American College of Obstetricians and Gynecologists' recommendations by a ratio of observed to expected visits of at least 110 percent) from 31.0 to 31.6 percent. All other levels of care, that is, adequate, intermediate and inadequate, were down slightly (table F). For 1990-99, the largest changes in utilization were for intensive use of care (up 28 percent) and inadequate care (down 33 percent).

Table F. Adequacy of Prenatal Care Utilization Index: United States, 1990, 1995-99

	Intensive use	Adequate	Intermediate	Inadequate
1999	31.6	43.1	13.6	11.7
1998	31.0	43.3	13.8	11.9
1997	30.7	43.3	14.0	12.0
1996	29.3	43.6	14.7	12.4
1995	28.8	43.7	14.7	12.8
1990	24.6	42.3	15.7	17.4

NOTE: See reference 58 for information on calculation of this measure; also see Technical notes of this report.

Obstetric procedures

Six specific obstetric procedures are reported on the birth certificate. Rates of four of these procedures have been rising steadily every year since 1989 (60, 61) (figure 5). In 1999 the most prevalent procedure, electronic fetal monitoring, was reported for nearly 3.3 million births, or 84 percent of all live births in the United States (table 36), a 15-percent increase over 1990. It has been shown that use of obstetric procedures may be underreported on the birth certificate (62-64).

At least 66 percent of mothers who had live births in 1999 received ultrasound, a 26-percent increase since 1990. The overall rates per 1,000 live births of stimulation of labor and induction of labor in 1999 were 179 (17.9 percent, a 58-percent increase since 1990) and 198 (19.8 percent, twice the 1990 levels), respectively (figure 6). As would be expected, induction rates increase with advancing gestational age, but rates have been rising for all gestation groups.

The overall rate for tocolysis has been slowly increasing, from 1.6 percent in 1990 to 2.4 percent in 1999 (a 50-percent increase). Tocolytics (agents that decrease uterine activity) are used in the management of preterm labor (33).

The overall rate for amniocentesis was 26.5 per 1,000 births (2.7 percent) in 1999, down 21 percent from 1990 (figure 5). Use of amniocentesis rises with increasing maternal age. Since 1990, amniocentesis rates have generally decreased for all age groups.

Table E. Percent of women with care beginning in the first trimester of pregnancy by specified race and Hispanic origin of mother: United States, 1990 and 1999

	Percent first trimester care		Percent change
	1999	1990	1990-99
Total, all races ¹	83.2	75.8	10
Cuban	91.4	84.8	8
Japanese	90.7	87.0	4
Chinese	88.5	81.3	9
Non-Hispanic white	88.4	83.3	6
Filipino	84.2	77.1	9
Hawaiian	79.6	65.8	21
Puerto Rican	77.7	63.5	22
Central and South American	77.6	61.5	26
Non-Hispanic black	74.1	60.7	22
Mexican	73.1	57.8	26
American Indian	69.5	57.9	20

¹Includes births to race/Hispanic origin groups not shown separately.

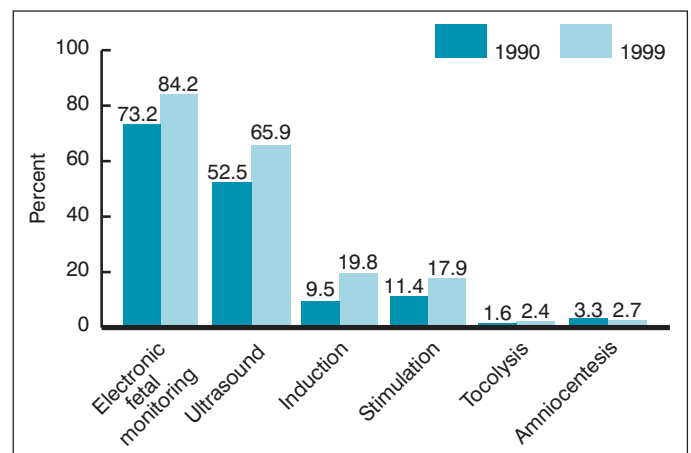


Figure 5. Percent of births with selected obstetric procedures: United States, 1990 and 1999

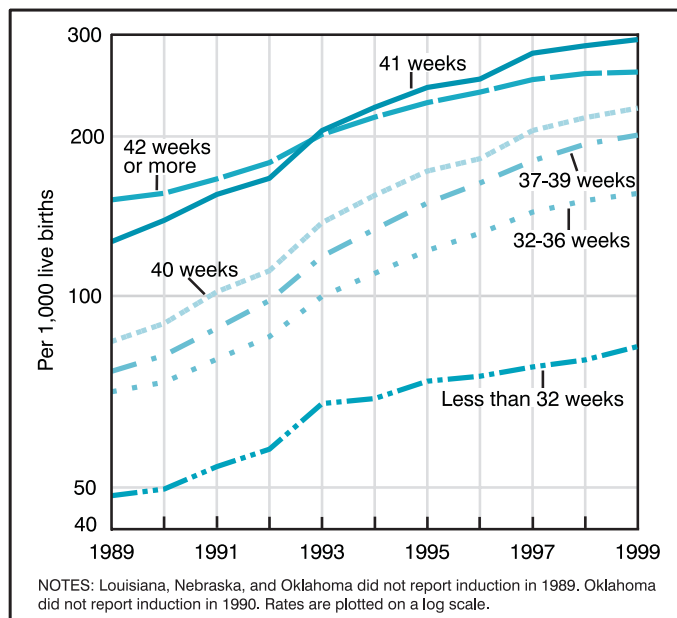


Figure 6. Rates of induction of labor by length of gestation in weeks: United States, 1989–99

Complications of labor and/or delivery

Of the 15 complications of labor and/or delivery reported on the birth certificate, the five most frequently reported in 1999 were meconium, moderate/heavy (55 per 1,000 live births), fetal distress (40 per 1,000), breech/malpresentation (39 per 1,000), dysfunctional labor (27 per 1,000), and premature rupture of membrane (PROM) (26 per 1,000) (table 37). It has been shown that levels of complications of pregnancy may be underreported on the birth certificate (62–64).

Although infrequent, placental complications such as abruptio placenta and placenta previa are serious events. Abruptio placenta occurred in approximately 22,000 births (6 per 1,000). Although the exact etiology is unknown, major risk factors include prior abruptio placenta and hypertension (33,65). Placenta previa occurred in approximately 12,500 births (3 per 1,000). Risk factors for placenta previa include increasing age and multiparity (33).

Rates for all complications varied among the major racial/ethnic subgroups (tables 27 and 28). Non-Hispanic black mothers had the highest rates for meconium (76 per 1,000) and fetal distress (51 per 1,000). Non-Hispanic white mothers had the highest rate of breech/malpresentation (44 per 1,000). American Indian and Cuban mothers had the highest rates of dysfunctional labor (36 and 40 per 1,000, respectively). PROM was reported most frequently for American Indian mothers (39 per 1,000). Mexican mothers had the lowest complication rates overall.

Complication rates generally varied by age, and this was notable for three of the most frequently reported complications (table 37). The highest rates of meconium, fetal distress, and PROM were reported in the youngest and oldest mothers (under 20 years and above 34 years of age).

Attendant at birth and place of delivery

More than 9 out of 10 births in 1999 (91.7 percent) were attended by a physician in a hospital, making this arrangement by far

the most typical (table 38). However, the percent of births with this arrangement was slightly lower in 1999 than in 1998 (91.9 percent) and has declined from 98.4 percent in 1975. For physician-attended births, 4.4 percent were by **doctors of osteopathy (DO's)** while the remaining were attended by **doctors of medicine (MD's)**. Although small, the number and percent of births attended by DO's has grown steadily since 1989, the first year data on DO's were available from the birth certificate. The percent of births attended by **midwives** increased sharply between 1975 (1.0 percent) and 1999 (7.7 percent). A recent report found that nearly all of the growth in midwife-attended births was for those in hospitals (61). About 95 percent of midwife-attended births in 1999 were by **certified nurse midwives (CNM's)**.

About 99 percent of births in 1999 were delivered in hospitals, virtually unchanged in the last several decades. The majority of out-of-hospital births were in a residence (65 percent) while 27 percent were in a **freestanding birthing center**.

About 92 percent of births to non-Hispanic white and black women were attended by a physician in a hospital compared with 90 percent of births to Hispanic women. Hispanic women were more likely to have midwife-attended hospital births (9 percent) than were either non-Hispanic white or black women (6 and 7 percent, respectively).

Method of delivery

The **rate of cesarean delivery** increased 4 percent between 1998 and 1999 (from 21.2 per 100 live births to 22.0) and was 6 percent higher than the recent low point in 1996 (20.7). This was the third consecutive year that the rate increased after falling each year during 1989–96 (table G and table 39). The rate in 1999 was still 4 percent lower than the rate of 22.8 in 1989, the first year this information was available on the birth certificate. The **primary cesarean rate** in 1999 (15.5 per 100 live births to women who had no previous cesarean) was 4 percent higher than in 1998 (14.9) and 6 percent higher than in 1997 (14.6). The rate had declined each year between 1989 and 1996 and remained steady between 1996 and 1997. The primary rate in 1999 was 4 percent lower than in 1989 (16.1).

Table G. Total and primary cesarean rates and vaginal births after previous cesarean delivery rates: United States, 1989–99

Year	Cesarean rate		VBAC rate ³
	Total ¹	Primary ²	
1999	22.0	15.5	23.4
1998	21.2	14.9	26.3
1997	20.8	14.6	27.4
1996	20.7	14.6	28.3
1995	20.8	14.7	27.5
1994	21.2	14.9	26.3
1993	21.8	15.3	24.3
1992	22.3	15.6	22.6
1991	22.6	15.9	21.3
1990	22.7	16.0	19.9
1989	22.8	16.1	18.9

¹Percent of all live births by cesarean delivery.
²Number of primary cesareans per 100 live births to women who have not had a previous cesarean.
³Number of vaginal births after previous cesarean (VBAC) delivery per 100 live births to women with a previous cesarean delivery.

The rate of **vaginal birth after previous cesarean delivery (VBAC)** declined 11 percent between 1998 and 1999—from 26.3 per 100 women with a previous cesarean to 23.4. The VBAC rate has declined 17 percent between 1996 and 1999 after increasing by 50 percent between 1989 and 1996 (from 18.9 to 28.3).

Overall cesarean rates increased steadily by age of the mother and were more than twice as high for mothers 40–54 years of age (34.7) than for teenagers (15.0) ([table 40](#)). Primary cesarean rates increased with additional age after age 24 years, to 24.6 for women 40–54 years of age. VBAC rates declined with increasing age—28.1 percent of teenagers who had a previous cesarean had a VBAC delivery compared with 18.2 percent of mothers 40–54 years of age. All age groups experienced increases in their total cesarean rate between 1998 and 1999 with mothers 30 years of age and over having slightly greater percent increases than younger women. All age groups experienced declines in VBAC rates between 1998 and 1999.

Non-Hispanic black women had a higher cesarean rate in 1999 (23.2) than either non-Hispanic white women (22.1) or Hispanic women (21.2). The percent increase between 1998 and 1999 was similar for non-Hispanic white and black women, about 4 percent each, compared with a 3-percent increase for Hispanic women. The primary cesarean rate for non-Hispanic black women (16.5) was higher than the rate for non-Hispanic white women (15.7) and Hispanic women (14.0). All groups experienced increases in their primary cesarean rate from 1998 to 1999, but the percent increase for non-Hispanic white women (4 percent) was slightly higher than for non-Hispanic black and Hispanic women (3 percent each). The VBAC rate in 1999 was highest for non-Hispanic white women (24.1), lowest for Hispanic women (20.3) and intermediate for non-Hispanic black women (23.2). The VBAC rate for each group declined between 1998 and 1999 with non-Hispanic white women having a greater percent decline (12 percent) than for the other groups (between 9 and 10 percent each).

American Indian and Asian or Pacific Islander (API) mothers had lower cesarean rates (18.9 and 20.2, respectively) than either non-Hispanic white or black mothers ([tables 24 and 25](#)). With the exception of Filipino mothers, all specified API categories had lower rates of cesarean delivery than either non-Hispanic white or black mothers. The rate of cesarean delivery varied between 20.6 and 23.1 for all Hispanic subgroups except for Cuban mothers whose rate was much higher (33.2) ([table 25](#)).

There was considerable variation in cesarean rates by State with the highest rate reported for Mississippi (27.3); the rate for Puerto Rico was 37.8 ([table 41](#)). (The rate for Hawaii, apparently the lowest at 13.8, is believed to be substantially underreported; see [Technical notes](#).) There was also considerable variation in VBAC rates by State, from 36.3 in New Hampshire to 11.3 in Louisiana.

All of the selected medical risk factors in [table 42](#) were associated with overall cesarean rates that were higher than the national average. Cesarean rates for the medical risk factors ranged from 22.2 for mothers with anemia to 49.1 for mothers with eclampsia. Certain complications of labor and/or delivery are also associated with high cesarean rates. Nearly all births with cephalopelvic disproportion were cesarean deliveries (96.4) while the cesarean rates for breech/malpresentation (84.5) and placenta previa (81.7) were also very high.

The percent of births that were delivered by either forceps or vacuum extraction was 7.4 percent in 1999, 22 percent lower than the

peak of 9.5 percent in 1994 (61). Births delivered by forceps declined 58 percent between 1989 and 1999, from 5.5 to 2.3 percent. Births delivered by vacuum extraction increased from 3.5 percent in 1989 to 6.2 percent in 1996 and 1997, a 77-percent increase. However, births delivered by vacuum extraction fell 18 percent between 1997 and 1999, to 5.1 percent. When only vaginal births are considered, the percent delivered by vacuum extraction fell 17 percent between 1997 (7.8 percent) and 1999 (6.5 percent) (tabular data not shown).

Infant health characteristics

Period of gestation

The **preterm birth rate** rose again in 1999 to 11.8 percent, from 11.6 percent in 1998. The proportion of infants born preterm (less than 37 completed weeks of gestation) has risen quite steadily during the 1990's from 10.6 percent, or by 11 percent. All of the current year rise, and most of that for the decade, has been among moderately preterm births (32–36 weeks). The rate of very preterm birth (less than 32 weeks) was stable at 1.96 percent for 1998–99 and has fluctuated only moderately since 1990. (See [tables 24, 25, 43, and 44](#).)

More than 90 percent of all neonatal deaths occur among infants born preterm; more than three-fourths of these deaths occur among those born at fewer than 32 weeks of gestation (66). Preterm newborns are also more likely to be neurologically impaired than infants born at longer gestations (67). Preterm birth results from spontaneous preterm labor, premature rupture of the membranes (PROM), or medical induction (these categories are not mutually exclusive). The rate of PROM appears to have declined slightly, but medically induced preterm births have more than doubled during the 1990's (labor may be induced preterm when the mother's or the infant's health is presumed to be at risk). (See section on Obstetric procedures and [figures 5 and 6](#).) A recent study concluded that substantial future reductions in preterm birth are unlikely until the mechanisms leading to preterm birth are better understood (67).

The incidence of preterm birth among non-Hispanic white infants climbed to 10.5 percent for 1999, compared with 10.2 percent in 1998, and 9.9 percent in 1997. Over the decade, the non-Hispanic white preterm rate has risen 24 percent (from 8.5 percent). Although this increase is influenced by the rise in the rate of multiple births (multiple births are about 6 times more likely to be born preterm than singleton births), preterm rates for singleton births have also been on the ascent (68) ([figure 7](#)). Since 1990, the non-Hispanic white singleton preterm rate has risen from 7.5 to 8.8 percent. Again, most of the rise was among moderately preterm births; the very preterm rate fluctuated only from 1.11 to 1.16 percent.

The preterm birth rate for black non-Hispanic births was unchanged for 1997–99 at 17.6 percent. This rate has declined from a high of 19.0 percent reported for 1991. Although still substantially higher than that for non-Hispanic white births, the preterm and very preterm rates for singleton non-Hispanic black births have been trending downward, albeit slowly ([figure 7](#)). The 1999 preterm rate for non-Hispanic black singleton births was 16.1 compared with 16.2 percent the previous year, and 17.9 percent in 1990. More fortuitously, very preterm births were down from 4.2 to 3.6 percent for 1990–99.

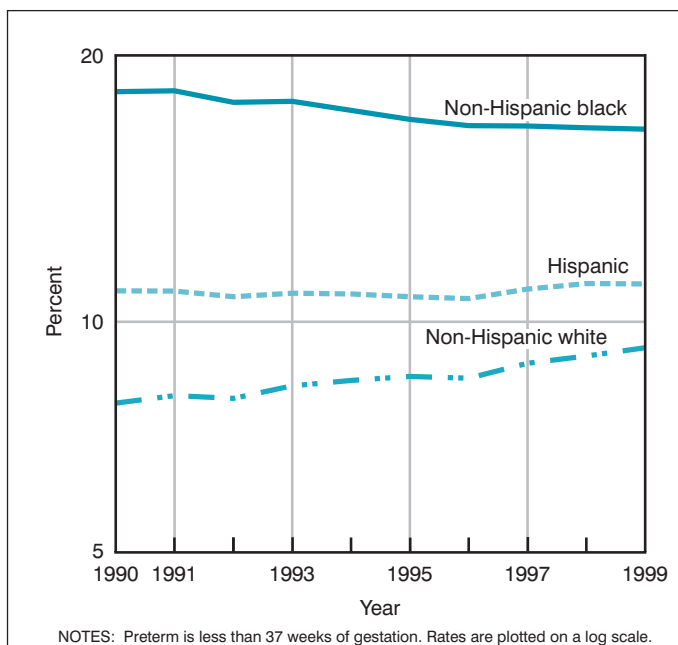


Figure 7. Rate of singleton preterm birth by race and Hispanic origin of mother: United States, 1990–99

The proportion of **Hispanic** preterm births was unchanged from the previous year at 11.4 percent. Over the decade, preterm singleton Hispanic births have risen slightly from 10.3 to 10.5 percent. There has been, however, essentially no change in the Hispanic rate of singleton very preterm births (1.5 percent in 1990 and 1999). Preterm rates for the Hispanic subgroups (all pluralities) ranged from 11.1 (Mexican) to 13.7 percent (Puerto Rican) for the current year. Rates for all of the subgroups increased between 1990 and 1999. (See [table 25](#) for 1999 data.)

The preterm birth rate for American Indians was 12.9 percent for 1999. Among the Asian or Pacific Islander subgroups, rates ranged from 7.6 percent for Chinese births to 12.4 percent for Filipino births ([table 24](#)). Preterm birth levels among American Indian and each Asian or Pacific Islander subgroup have also risen during the 1990's.

Birthweight

The **percent low birthweight (LBW)** (less than 2,500 grams) was 7.6 for 1999, unchanged from 1998. LBW has been climbing fairly steadily since the mid-1980's (6.8 percent in 1985 and 1986), and has risen 9 percent (from 7.0 percent) since 1990. (See [tables 43–47](#).) The **percent very low birthweight (VLBW)** (less than 1,500 grams) was 1.45 for 1999, also unchanged from the previous year. The rate of VLBW has also risen over the last two decades, from 1.15 percent in 1980, and from 1.27 percent in 1990. Low birthweight infants disproportionately suffer long-term morbidity and early death (69). Less than half of 1 percent of infants born at weights of more than 2,499 grams do not survive the first year of life, compared with about 2 percent of moderately LBW infants (1,500 to 2,499 grams), and 25 percent of VLBW infants (66).

The upward trends in LBW and VLBW of recent years have been strongly influenced by the upsurge in the multiple birth rate; twins and triplets and other higher order multiples are comprising a growing proportion of all births and tend to be born at much lower weights than

singletons (70). In 1999, 6 percent of singletons weighed less than 2,500 grams compared with 57 percent of multiples.

The youngest mothers (less than 15 years) and the oldest (45 years of age and over) are most likely to have a LBW infant. See [figure 8](#). Much of the low birthweight incidence among older mothers is associated with their greater preponderance of multiple births. (More than half of the LBW infants born to women 45 years of age and over in 1999 were born in a multiple birth.) When only singleton births are examined, women 45 years and over were less likely than the youngest mothers to bear a LBW child.

The impact of multiple births has been most pronounced for non-Hispanic white births, among whom multiple birth rates have risen the swiftest (70). Overall LBW for this group has climbed 18 percent, from 5.6 to 6.6 percent since 1990 ([table 44](#)). Although much of this rise can be attributed to the influence of multiple births, singleton LBW has also risen (from 4.6 to 4.9 percent); this increase is largely unexplained ([table H](#)).

Overall LBW among births to black mothers has declined from 13.3 to 13.1 percent between 1990 and 1999, but remains higher than levels reported for the early and mid-1980's (low of 12.6 percent). Singleton LBW for black infants however, has dropped to the lowest levels reported ([table H](#)). Notwithstanding this recent decline, singleton black infants are twice as likely as singleton white and Hispanic infants to be born LBW.

Overall and singleton LBW among Hispanic births has been comparatively stable over the decade, rising only slightly from 6.1 to 6.4 percent (all pluralities) and 5.2 to 5.3 percent (singletons only) between 1990 and 1999. Among the Hispanic subgroups, LBW levels ranged from 5.9 percent for Mexican to 9.3 percent for Puerto Rican births. (See [table 25](#).)

The incidence of low birthweight among **American Indian** infants was 7.1 percent for 1999. Among **Asian and Pacific Islander** subgroups LBW ranged from a low of 5.2 percent for Chinese to a high of 8.3 percent for Filipino births ([table 24](#)).

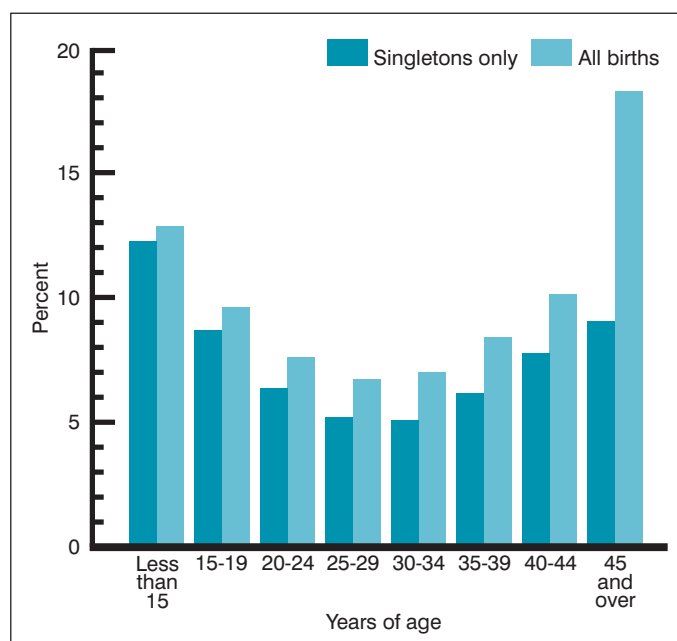


Figure 8. Percent low birthweight for singletons and for all pluralities by maternal age: United States, 1999

Table H. Percent low birthweight among singletons by race and Hispanic origin of mother: United States, 1980, 1985, and 1990–99

Year	Total	White		Black		Hispanic ¹
		Total	Non-Hispanic	Total	Non-Hispanic	
1999	6.05	5.02	4.93	11.32	11.44	5.34
1998	6.05	5.05	4.91	11.33	11.44	5.40
1997	6.08	5.02	4.95	11.37	11.46	5.43
1996	6.03	5.00	4.90	11.45	11.55	5.34
1995	6.05	4.98	4.87	11.59	11.66	5.36
1994	6.05	4.91	4.79	11.69	11.79	5.37
1993	6.05	4.83	4.70	11.81	11.90	5.34
1992 ²	5.93	4.71	4.59	11.84	11.91	5.22
1991 ²	5.99	4.74	4.61	12.09	12.15	5.29
1990 ³	5.90	4.68	4.56	11.86	11.92	5.23
1985	5.80	4.77	---	11.35	---	---
1980 ⁴	5.96	4.90	---	11.46	---	---

--- Data not available.

¹Includes persons of Hispanic origin of any race.

²Excludes data for New Hampshire, which did not require reporting of Hispanic origin of mother.

³Excludes data for New Hampshire and Oklahoma, which did not require reporting of Hispanic origin of mother.

⁴Based on 100 percent of births in selected States and a 50-percent sample of births in all other States; see Technical notes.

NOTE: Low birthweight is less than 2,500 grams or 5 lb 8 oz.

The percent **macrosomia** (birthweight of at least 4,000 grams) declined from 10.1 to 9.9 percent between 1998 and 1999 (see [tables 24, 25 and 43](#) for 1999 data). The percent of births born at higher birthweights peaked at about 11 during the 1980's, but has declined in the 1990's.

The **median birthweight** for all births for 1999 was 3,350 grams (7 pounds, 7 ounces), unchanged since 1995. The median weight for white births was 3,390 grams and for black births 3,180 grams.

Low and very low birthweight rates vary widely **by State** ([tables 46 and 47](#)). For 1999, LBW levels among non-Hispanic white births ranged from a low of 5.2 percent in Alaska and Hawaii to a high of 8.4 percent in Wyoming. Among States with at least 1,000 births to non-Hispanic black mothers, LBW rates for this group ranged from 10.2 percent in Washington State, to 16.1 percent in the District of Columbia.

Apgar score

The Apgar score, devised almost 50 years ago by Virginia Apgar, M.D., is a means of evaluating the physical condition of the newborn at 1 minute, 5 minutes, and if desired, at additional 5-minute intervals after delivery (32, 71, 72). The score is composed of measurements of five easily identifiable infant characteristics—heart rate, respiratory effort, muscle tone, reflex irritability, and color. Each characteristic is assessed and assigned a value of 0–2, with 2 being optimum. The total score is the sum of the scores of the five components (71). A score of 0 to 3 indicates an infant in need of resuscitation; a score in the range of 4 to 6 is considered intermediate; a score of 7 or greater indicates that the neonate is in good to excellent physical condition. The **5-minute Apgar score**, especially a change in the score between 1 and 5 minutes, is a useful clinical indicator of newborn status, especially in those neonates who require resuscitation (32).

In 1999 all States except California and Texas collected information on the 5-minute Apgar score. Of the births in the reporting States

(which accounted for 78 percent of all births in the U.S.), only 1.4 percent of babies had Apgar scores that were considered low (below 7) at 5 minutes after birth ([tables 24 and 25](#)), unchanged since 1993.

In general, the variation among racial and ethnic groups in the percent of babies with low 5-minute Apgar scores was consistent with the percent of babies that were born preterm and/or low birthweight.

Abnormal conditions of the newborn

Since 1990, three of the eight specific abnormal conditions listed on the birth certificate have been most frequently reported: assisted ventilation less than 30 minutes, assisted ventilation of 30 minutes or longer, and hyaline membrane disease/respiratory distress syndrome (RDS) ([table 48](#)).

The rate for assisted ventilation less than 30 minutes was 21 per 1,000 in 1999. The rate slowly increased from the 1990 rate of 13 per 1,000 and has remained at about the current rate since 1996. The rate of assisted ventilation of 30 minutes or longer was 10 per 1,000 in 1999. The overall rate of hyaline membrane disease (RDS) was 6 per 1,000 in 1999; this condition occurs most frequently in infants of less than 28 weeks gestation (72).

Rates of the other conditions have fluctuated slightly each year of the decade. During the 1990's, black infants in each age group have generally had the highest rates of assisted ventilation of 30 minutes or longer, while white infants in each age group have had the highest rates of birth injury. Risk factors for birth injury include macrosomia, cephalopelvic disproportion, and breech/malpresentation (72).

It has been shown that abnormal conditions may be underreported or incorrectly reported on the birth certificate (62, 73). Some abnormalities are difficult to recognize at birth (e.g., fetal alcohol syndrome); an abnormal condition present at birth may be diagnosed after the birth certificate has been completed (74, 75).

Congenital anomalies

Congenital anomalies are a major cause of neonatal deaths, physical defects, and metabolic diseases. For some anomalies, early ascertainment and immediate medical and surgical care is vital (72). Congenital anomalies are reported on the birth certificates of 49 States and the District of Columbia, accounting for 99 percent of 1999 births ([table 49](#)). Because many of the congenital anomalies tracked on birth certificates occur infrequently, the rates shown in this report are calculated per 100,000 live births.

Congenital anomalies are underreported on the birth certificate (62, 76, 77). A number of factors limit complete reporting of such conditions, including recognizability and severity (62, 78–80). Serious malformations are more likely to be reported. Caution should also be used in comparing yearly rates for a specific anomaly as a small change in the number of anomalies reported can result in a relatively large change in rates.

Cleft lip/palate was reported at a rate of 81 per 100,000 births in 1999 compared with 88 in 1990. The rate of clubfoot has changed little during the 1990's and was 56 per 100,000 in 1999. The rate of Down's syndrome has generally been stable since 1993 (45.5 per 100,000 in 1999) ([table 49](#)).

In 1992 the U.S. Public Health Service recommended that women of childbearing age increase consumption of the vitamin folic acid to

prevent spina bifida and anencephalus. Four years later, the Food and Drug Administration mandated that by January 1998 all cereal grain products be fortified with folic acid. In 1999 survey results showed increased folate status among women of childbearing age (81,82). The rate of spina bifida/meningocele has steadily declined from the 1995 rate of 28.1 per 100,000 to 20.1. Since 1994, the rate of anencephalus has ranged between 11 (1994 and 1999) and 13 per 100,000 (1996–97).

For many anomalies, rates vary widely with maternal age (table 49). For example, rates for Down's syndrome and heart malformations have consistently been higher for mothers aged 35 years and over, according to birth certificate data in the 1990's.

Multiple births

The number of births in twin deliveries continued to climb in 1999, rising 3 percent to 114,307 births. The twin birth rate (the number of twin births per 1,000 live births) was also up for 1998–99, rising 3 percent, to 28.9 per 1,000 births. Since 1980 the number of twins has risen 67 percent (from 68,339), and the twin birth rate by 53 percent (from 18.9) (70). (See table 50 for 1999 data.)

Reversing a long-time trend, the number and rate of triplet and other higher order multiple births (triplet/+) dropped by 4 percent for 1999 to 7,321, or 184.9 triplet/+ births per 100,000 live births. Declines in all of the higher-order pluralities, that is, triplets, quadruplets, and quintuplet and other higher order multiples, were reported (table J). The number and rate of triplet/+ had been escalating rapidly since 1980, soaring from 1,337 births and a rate of only 37.0 (70). (See figure 9.)

The extraordinary rise in multiple births over the last two decades, especially in triplet/+ births, has been associated with two related trends; advances in, and greater access to assisted reproductive medicine (i.e., ovulation-inducing drugs and assisted reproductive techniques (ART) such as *in vitro* fertilization (IVF)), and with the older age of childbearing (women in their thirties are more likely to have a multiple birth even without the help of fertility therapies) (83–85). A recent study estimated that the majority of triplet/+ births in 1997 were the result of ART (43 percent) and ovulation-inducing drugs (38 percent)—only about 20 percent of triplet/+ births were spontaneously conceived (86).

There was a pronounced decline in triplet/+ births to non-Hispanic white women (262.8 to 251.8 per 100,000 births for 1998–99), but the sudden decline for 1999 was not observed among all age and racial/ethnic groups; women 35–39 years of age were more likely to have a triplet/+ birth in 1999 compared with 1998, as were non-Hispanic black (95.2 for 1999) and Hispanic women (76.3 for 1999). Although some reduction in the overall number and rate of triplet/+ births is expected as the population of women aged 30 years and over declines, the sudden downturn in age-specific triplet/+ birth rates may signal a more fundamental shift. In 1999 The American College of Obstetricians and Gynecologists and The American Society of Reproductive Medicine issued recommendations to help prevent triplet/+ births because they are at elevated risk of poor outcomes (87, 88). Recent refinements to fertility-enhancing therapies, particularly to IVF, which lower the risk of multifetal pregnancy, also may affect the future incidence of "multiple multiples" (87–90).

Twin birth rates rose between 1998 and 1999 for nearly all age groups, and for non-Hispanic white (31.5 per 1,000) and non-Hispanic black women (32.1). A small decline in the twinning rate for Hispanic women was reported (20.1).

Table J. Numbers of twin, triplet, quadruplet, and quintuplet and other higher order multiple births: United States, 1989–99

Year	Twins	Triplets	Quadruplets	Quintuplets and other higher order multiples ¹
1999	114,307	6,742	512	67
1998	110,670	6,919	627	79
1997	104,137	6,148	510	79
1996	100,750	5,298	560	81
1995	96,736	4,551	365	57
1994	97,064	4,233	315	46
1993	96,445	3,834	277	57
1992	95,372	3,547	310	26
1991	94,779	3,121	203	22
1990	93,865	2,830	185	13
1989	90,118	2,529	229	40

¹Quintuplets, sextuplets, and higher order multiple births are not differentiated in the national data set.

Historically, twin birth rates have been highest for mothers 35–39 years of age. In 1999 however, twin birth rates rose steadily with maternal age and were highest for women aged 50–54 years (data not shown). Since 1990, the twin birth rate has risen 80 percent among women 40–44 years of age (from 24.7 to 44.5 per 1,000), and almost 600 percent among women aged 45–49 years (from 23.8 to 155.7), compared to only a 6 percent rise for women under age 20 years (14.3 to 15.2) (figure 10). Comparable trend data are not available for women aged 50–54 years, but in 1999 more than a third of births (34 percent) to women in the oldest age group were born in a twin delivery (data not shown).

Multiple births present substantial perinatal risk to both mother and infant, and risk increases with plurality. Mothers of multiples suffer more ante- and postpartum complications than singletons and their infants are born considerably smaller; on average, twins weigh about a third less, and triplets about half of singletons (91). Multiples are more likely to be admitted to neonatal intensive care and are less likely to survive the first year of life (66, 91).

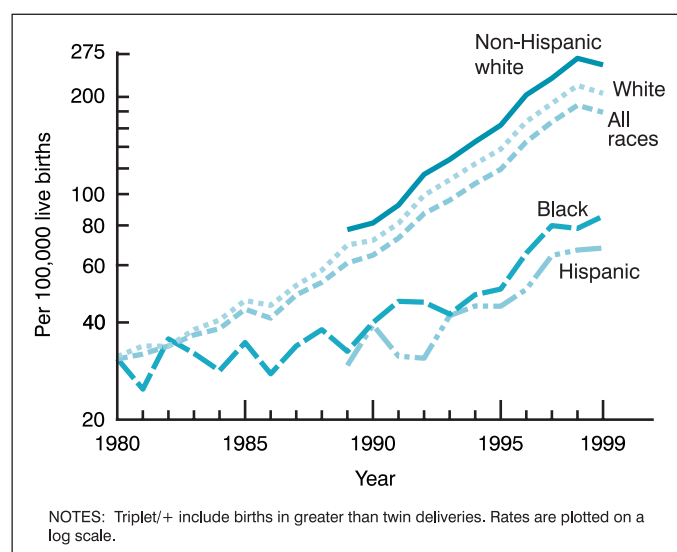


Figure 9. Triplet/+ birth rates by race and Hispanic origin of mother: United States, 1980–99

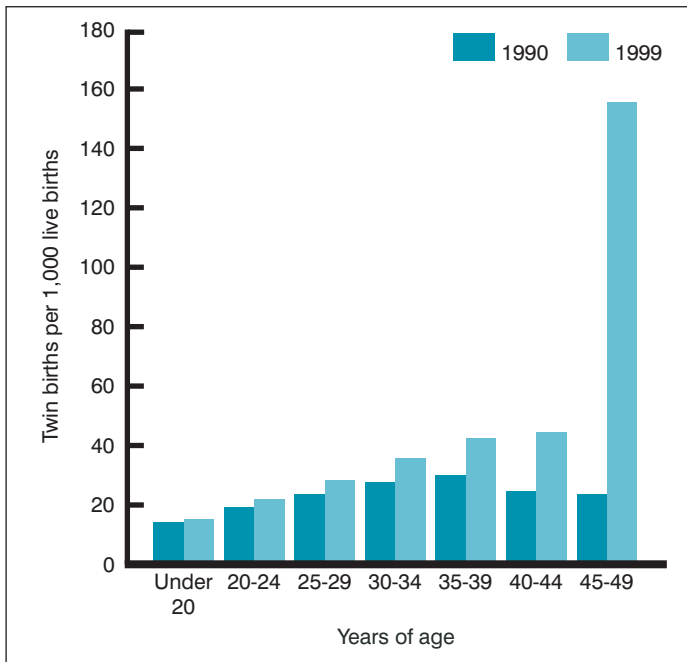


Figure 10. Twin birth rates by age of mother: United States, 1990 and 1999

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TABLE:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Geographic area:																									
States ¹										10	11	12							19						
United States or all reporting areas	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Years:																									
Current year only		2	3				7	8		10	11	12	13	14	15	16	17		19		21	22	23	24	25
Trend	1			4	5	6			9									18		20					
Type of entry:																									
Number of births	1	2				6	7			10	11	12	13	14	15	16	17		19		21	22			
Rates or other measures	1		3	4	5	6		8	9	10			13	14	15	16	17	18	19	20	21	22	23	24	25
Characteristics:																									
Age of father																				20					
Age of mother		2	3	4			7		9									17	18		21				
Alcohol use																								24	25
Apgar score																								24	25
Birthweight																							23	24	25
Day of week																16									
Education													13	14							21				
Gestational age																						22	23	24	25
Hispanic origin of mother						⁴ 6	⁴ 7	⁴ 8	⁴ 9			⁴ 12		⁴ 14			⁶ 17	⁶ 18	⁶ 19		⁶ 21	⁶ 22	⁴ 23		⁴ 25
Live-birth order		2	3		5		7	8					13	14											
Method of delivery																16								24	25
Month of birth															15										
Nativity of mother													13	14										24	25
Prenatal care																								24	25
Race of father																				³ 20					
Race of mother	² 1	² 2	² 3	² 4	³ 5	⁴ 6	⁴ 7	⁴ 8	⁴ 9		² 11	⁴ 12	⁵ 13	⁴ 14	³ 15	³ 16	⁶ 17	⁶ 18	⁶ 19		³ 21	⁶ 22	⁴ 23	⁵ 24	⁴ 25
Sex of child													13	14											
Teenage mothers										10			13	14											
Tobacco use																								24	25
Unmarried mothers													13	14				17	18	19					
Weight gain during pregnancy																						22	23	24	25

TABLE:	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Geographic area: States ¹									34							41					46	47			
United States or all reporting areas	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Years: Current year only	26	27	28	29	30	31	32	33	34	35	36	37	38		40	41	42	43		45	46	47	48	49	50
Trend														39					44						
Type of entry: Number of births	26	27	28	29	30	31		33		35	36	37	38	39	40		42	43		45	46	47	48	49	50
Rates or other measures	26	27	28	29	30	31	32	33	34	35	36	37		39	40	41	42	43	44	45	46	47	48	49	50
Characteristics: Abnormal conditions of newborn																							48		
Age of mother	26			29	30		32	33			36	37			40					45			48	49	50
Attendant at birth													38												
Birthweight							32											43	44	45	46	47			
Complications of labor		27	28									37					42								
Congenital anomalies																								49	
Education						31																			
Gestational age																		43	44						
Hispanic origin of mother			⁴ 28		⁴ 30	⁶ 31	⁶ 32	⁶ 33	⁶ 34	⁶ 35			⁶ 38	⁶ 39	⁶ 40	⁶ 41		⁶ 43	⁶ 44	⁶ 45	⁶ 46	⁶ 47		⁶ 50	
Medical risk factors	26	27	28														42								
Method of delivery														39	40	41	42								
Obstetric procedures		27	28								36														
Place of delivery													38												
Multiple births																									50
Prenatal care								33	34	35															
Race of mother	³ 26	⁵ 27	⁴ 28	³ 29	⁴ 30	³ 31	⁶ 32	⁶ 33	⁶ 34	⁶ 35	³ 36	³ 37	⁶ 38	⁶ 39	⁶ 40	⁶ 41		⁶ 43	³ 44	⁶ 45	⁶ 46	⁶ 47	³ 48	³ 49	⁶ 50
Tobacco use				29	30	31	32																		

¹Includes data for Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas; data for American Samoa not available for tables 34 and 41.
²Includes white, black, American Indian, Asian or Pacific Islander.
³Includes white and black.
⁴Includes Mexican, Puerto Rican, Cuban, Central and South American, other and unknown Hispanic, non-Hispanic white, and non-Hispanic black.
⁵Includes white, black, American Indian, Chinese, Japanese, Hawaiian, Filipino, and other Asian and Pacific Islanders.
⁶Includes Hispanic, non-Hispanic white, and non-Hispanic black.

Table 8. Fertility rates and birth rates by age of mother, live-birth order, Hispanic origin of mother, and by race for mothers of non-Hispanic origin: United States, 1999 --Con.

[Rates are live births per 1,000 women in specified age and racial group. Live-birth order refers to number of children born alive to mother. Figures for live-birth order not stated are distributed]

Live-birth order and origin of mother	15-44 years ¹	Age of mother									
		10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years ²
			Total	15-17 years	18-19 years						
Non-Hispanic ⁴											
Total ⁵	60.7	0.8	42.5	23.5	70.6	99.4	110.6	87.8	37.3	7.1	0.4
1st child	24.9	0.8	33.7	21.1	52.2	46.5	43.1	26.6	8.7	1.6	0.1
2d child	20.1	0.0	7.4	2.2	15.1	34.1	38.5	32.8	12.7	2.1	0.1
3d child	9.8	*	1.3	0.2	2.8	13.6	18.6	17.4	8.6	1.5	0.1
4th child	3.6	*	0.2	0.0	0.4	3.9	6.7	6.6	4.0	0.8	0.0
5th child	1.3	*	0.0	*	0.0	1.0	2.3	2.4	1.6	0.4	0.0
6th and 7th child	0.8	*	0.0	*	0.0	0.3	1.2	1.5	1.2	0.4	0.0
8th child and over	0.3	*	*	*	*	0.0	0.2	0.4	0.6	0.3	0.0
White	57.8	0.3	34.0	17.1	58.9	89.9	111.0	90.3	37.3	6.8	0.4
1st child	24.0	0.3	28.0	15.8	46.0	44.9	45.3	27.9	8.9	1.6	0.1
2d child	19.6	0.0	5.3	1.2	11.2	31.2	39.7	34.6	12.8	2.1	0.1
3d child	9.2	*	0.7	0.1	1.6	10.8	17.9	18.0	8.7	1.4	0.1
4th child	3.2	*	0.1	*	0.2	2.5	5.7	6.4	3.9	0.8	0.0
5th child	1.0	*	0.0	*	0.0	0.5	1.6	2.0	1.5	0.4	0.0
6th and 7th child	0.6	*	*	*	*	0.1	0.6	1.2	1.0	0.3	0.0
8th child and over	0.2	*	*	*	*	0.0	0.1	0.3	0.4	0.3	0.0
Black	72.2	2.7	83.7	53.7	126.8	146.3	104.9	66.3	31.5	6.7	0.4
1st child	27.2	2.7	61.4	46.1	83.3	53.9	26.1	14.4	5.6	1.1	0.1
2d child	21.4	0.1	17.6	6.8	33.2	49.8	33.4	20.7	9.0	1.6	0.1
3d child	12.7	*	4.0	0.7	8.6	27.3	23.6	15.0	7.3	1.5	0.1
4th child	5.9	*	0.6	0.1	1.4	10.6	11.9	7.9	4.3	0.9	0.0
5th child	2.6	*	0.1	*	0.2	3.5	5.6	3.9	2.3	0.6	0.0
6th and 7th child	1.8	*	0.0	*	*	1.2	3.6	3.3	2.0	0.6	0.0
8th child and over	0.6	*	*	*	*	0.1	0.7	1.2	1.1	0.4	0.0

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
0.0 Quantity more than zero but less than 0.05.¹ Fertility rates computed by relating total births, regardless of age of mother, to women aged 15-44 years.² Birth rates computed by relating births to women aged 45-54 years to women aged 45-49 years.³ Includes Central and South American and other and unknown Hispanic.⁴ Includes origin not stated.⁵ Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin;

Table 11. Live births by race of mother: United States, each State and territory, 1999

[By place of residence]

State	Number				
	All races	White	Black	American Indian ¹	Asian or Pacific Islander
United States ²	3,959,417	3,132,501	605,970	40,170	180,776
Alabama	62,122	41,747	19,753	158	464
Alaska	9,950	6,565	441	2,474	470
Arizona	81,145	70,946	2,729	5,583	1,887
Arkansas	36,729	28,421	7,680	236	392
California	518,508	421,541	35,403	3,243	58,321
Colorado	62,167	56,711	2,899	647	1,910
Connecticut	43,310	36,277	5,383	78	1,572
Delaware	10,676	7,696	2,671	32	277
District of Columbia	7,522	2,200	5,167	6	149
Florida	197,023	146,696	45,078	850	4,399
Georgia	126,717	81,297	42,133	219	3,068
Hawaii	17,038	3,999	460	203	12,376
Idaho	19,872	19,212	78	299	283
Illinois	182,068	140,267	34,239	214	7,348
Indiana	86,031	75,534	9,300	112	1,085
Iowa	37,558	35,363	1,164	208	823
Kansas	38,782	34,611	2,855	367	949
Kentucky	54,403	48,791	4,977	101	534
Louisiana	67,136	38,587	27,267	325	957
Maine	13,616	13,242	106	99	169
Maryland	71,967	44,385	24,260	194	3,128
Massachusetts	80,939	68,328	8,168	151	4,292
Michigan	133,607	105,354	24,044	700	3,509
Minnesota	65,970	57,518	4,016	1,174	3,262
Mississippi	42,684	22,665	19,406	224	389
Missouri	75,432	62,592	11,273	332	1,235
Montana	10,785	9,376	35	1,278	96
Nebraska	23,907	21,685	1,268	467	487
Nevada	29,362	25,036	2,194	431	1,701
New Hampshire	14,041	13,628	139	27	247
New Jersey	114,105	84,444	21,133	187	8,341
New Mexico	27,191	22,864	497	3,460	370
New York	255,612	183,874	53,381	687	17,670
North Carolina	113,795	81,236	28,428	1,679	2,452
North Dakota	7,639	6,743	87	730	79
Ohio	152,584	127,733	22,087	281	2,483
Oklahoma	49,010	38,684	4,629	4,836	861
Oregon	45,204	41,417	904	704	2,179
Pennsylvania	145,347	121,104	20,363	354	3,526
Rhode Island	12,366	10,787	984	152	443
South Carolina	54,948	34,985	19,069	159	735
South Dakota	10,524	8,671	89	1,663	101
Tennessee	77,803	60,004	16,498	142	1,159
Texas	349,245	298,081	40,097	801	10,266
Utah	46,290	44,040	265	619	1,366
Vermont	6,567	6,473	40	9	45
Virginia	95,469	68,509	22,173	150	4,637
Washington	79,586	68,273	3,331	1,875	6,107
West Virginia	20,728	19,799	752	11	166
Wisconsin	68,208	58,770	6,505	971	1,962
Wyoming	6,129	5,740	72	268	49
Puerto Rico	59,563	54,548	5,003	---	---
Virgin Islands	1,671	313	1,288	65	5
Guam	4,021	320	49	2	3,650
American Samoa	1,736	6	-	-	1,730
Northern Marianas	1,381	30	-	-	1,351

- Quantity zero.

--- Data not available.

¹ Includes births to Aleuts and Eskimos.² Excludes data for the territories.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 13. Total number of births, rates (birth, fertility, and total fertility), and percent of births with selected demographic characteristics, by detailed race of mother and place of birth of mother: United States, 1999

Characteristic	All races	White	Black	American Indian ¹	Asian or Pacific Islander					
					Total	Chinese	Japanese	Hawaiian	Filipino	Other
Number										
Births	3,959,417	3,132,501	605,970	40,170	180,776	28,853	8,722	6,093	30,677	106,431
Rate										
Birth rate ²	14.5	13.9	17.4	16.8	16.7	---	---	---	---	---
Fertility rate ³	65.9	65.1	70.1	69.7	65.6	---	---	---	---	---
Total fertility rate ⁴	2,075.0	2,065.0	2,146.5	2,056.5	1,927.0	---	---	---	---	---
Sex ratio ⁵	1,049	1,052	1,031	1,029	1,064	1,075	1,063	1,047	1,069	1,062
Percent										
All births										
Births to mothers under 20 years	12.3	10.9	20.7	20.2	5.1	0.9	2.1	18.2	5.9	5.5
4th- and higher-order births	10.5	9.7	14.9	19.1	7.2	2.3	3.9	14.3	7.2	8.4
Births to unmarried mothers	33.0	26.8	68.9	58.9	15.4	6.9	9.9	50.4	21.1	14.5
Mothers completing 12 years or more of school	78.3	78.7	74.0	67.8	87.6	88.0	98.0	83.2	93.7	85.2
Mothers born in the 50 States and DC	79.8	81.5	88.6	96.0	16.7	9.7	41.3	97.8	20.1	10.9
Mothers born in the 50 States and DC										
Births to mothers under 20 years	13.3	11.2	22.4	20.7	16.0	4.2	4.5	18.3	15.8	21.5
4th- and higher-order births	10.0	8.8	15.0	19.4	7.6	3.8	4.7	14.2	7.2	6.2
Births to unmarried mothers	34.0	25.6	72.1	60.1	33.8	11.3	17.6	50.7	39.6	32.5
Mothers completing 12 years or more of school	82.6	84.8	73.0	67.8	87.1	96.1	96.6	83.3	88.9	83.0
Mothers born outside the 50 States and DC										
Births to mothers under 20 years	8.1	9.6	6.6	7.1	2.9	0.5	0.5	*	3.4	3.6
4th- and higher-order births	12.6	13.9	13.2	11.3	7.1	2.2	3.4	20.8	7.1	8.6
Births to unmarried mothers	29.2	32.1	43.3	29.1	11.7	6.4	4.5	37.4	16.4	12.3
Mothers completing 12 years or more of school	60.9	51.5	81.8	67.9	87.7	87.1	99.1	76.2	94.9	85.4

--- Data not available.

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.

¹ Includes births to Aleuts and Eskimos.² Birth rate per 1,000 population.³ Fertility rate per 1,000 women aged 15-44 years.⁴ Rates are sums of birth rates for 5-year age groups multiplied by 5.⁵ Male live births per 1,000 female live births.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 17. Number, birth rate, and percent of births to unmarried women by age, race, and Hispanic origin of mother: United States, 1999

Measure and age of mother	All races ¹	White		Black		Hispanic ²
		Total	Non-Hispanic	Total	Non-Hispanic	
Number						
All ages	1,308,560	839,552	518,291	417,476	406,802	322,311
Under 15 years	8,737	4,457	1,954	3,958	3,871	2,542
15-19 years	374,485	245,467	154,620	115,739	113,114	90,935
15 years	21,407	12,821	6,409	7,812	7,648	6,470
16 years	46,078	29,623	16,465	14,747	14,390	13,237
17 years	75,906	50,509	30,811	22,592	22,094	19,745
18 years	105,288	69,957	45,906	31,589	30,862	24,005
19 years	125,806	82,557	55,029	38,999	38,120	27,478
20-24 years	476,497	303,489	191,268	155,600	151,977	112,439
25-29 years	246,873	156,933	91,864	78,984	76,821	65,387
30-34 years	124,894	79,427	46,787	39,643	38,279	32,975
35-39 years	62,637	40,308	25,592	19,362	18,711	14,768
40 years and over	14,437	9,471	6,206	4,190	4,029	3,265
Rate per 1,000 unmarried women in specified group						
15-44 years ³	44.4	38.1	27.9	71.5	---	93.4
15-19 years	40.4	33.7	25.5	78.4	---	73.8
15-17 years	25.5	21.0	14.6	51.5	---	52.4
18-19 years	63.3	53.3	42.3	117.9	---	107.6
20-24 years	72.9	61.4	46.0	130.3	---	143.3
25-29 years	60.2	53.4	37.0	89.6	---	143.6
30-34 years	39.3	35.8	25.0	50.3	---	93.3
35-39 years	19.3	17.5	13.0	24.7	---	44.1
40-44 years ⁴	4.6	4.1	3.1	5.9	---	11.3
Percent of births to unmarried women						
All ages	33.0	26.8	22.1	68.9	69.1	42.2
Under 15 years	96.5	94.0	95.4	99.5	99.5	93.3
15-19 years	78.7	72.6	72.6	95.5	95.6	72.9
15 years	93.5	90.3	92.0	99.3	99.4	88.8
16 years	89.4	85.5	87.2	98.7	98.7	83.6
17 years	85.1	80.5	81.8	97.8	97.8	78.6
18 years	78.6	72.7	73.7	95.9	96.0	71.0
19 years	70.5	63.5	63.2	92.2	92.3	64.4
20-24 years	48.5	40.6	37.2	80.5	80.7	48.6
25-29 years	22.9	18.0	13.8	56.9	57.0	32.1
30-34 years	14.0	10.7	7.8	43.3	43.3	25.1
35-39 years	14.4	11.3	8.7	41.0	40.9	25.4
40 years and over	16.5	13.4	10.7	42.0	41.9	27.3

--- Data not available.

¹ Includes races other than white and black and origin not stated.² Includes all persons of Hispanic origin of any race.³ Birth rates computed by relating total births to unmarried mothers, regardless of age of mother, to unmarried women aged 15-44 years.⁴ Birth rates computed by relating births to unmarried mothers aged 40 years and over to unmarried women aged 40-44 years.

NOTES: For 48 States and the District of Columbia, marital status is reported on the birth certificate; for Michigan and New York, mother's marital status is inferred; see Technical notes. Rates cannot be computed for unmarried non-Hispanic black women because the necessary populations are not available.

Table 21. Live births by educational attainment, and percent of mothers completing 12 years or more and 16 years or more of school, by age and race of mother: United States, 1999 --Con.

Age and race of mother	Total	Years of school completed by mother						Percent 12 years or more	Percent 16 years or more
		0-8 years	9-11 years	12 years	13-15 years	16 years or more	Not Stated		
Black, non-Hispanic									
All ages	588,981	14,069	135,306	228,332	133,984	65,779	11,511	74.1	11.4
Under 15 years	3,890	2,985	768	-	-	-	137	-	-
15-19 years	118,285	4,990	64,416	40,185	6,416	-	2,278	40.2	-
15 years	7,698	2,099	5,355	-	-	-	244	-	-
16 years	14,573	1,115	12,822	334	-	-	302	2.3	-
17 years	22,580	641	17,804	3,612	51	-	472	16.6	-
18 years	32,155	590	15,223	14,703	1,075	-	564	49.9	-
19 years	41,279	545	13,212	21,536	5,290	-	696	66.1	-
20-24 years	188,247	2,178	41,254	88,312	45,678	7,685	3,140	76.5	4.2
25-29 years	134,784	1,624	16,086	51,875	40,794	21,920	2,485	86.6	16.6
30-34 years	88,403	1,214	7,715	30,240	25,884	21,387	1,963	89.7	24.7
35-39 years	45,746	791	4,183	14,697	12,724	12,145	1,206	88.8	27.3
40 years and over	9,626	287	884	3,023	2,488	2,642	302	87.4	28.3
Hispanic ²									
All ages	764,339	158,351	208,350	223,122	102,507	55,076	16,933	50.9	7.4
Under 15 years	2,725	2,009	595	-	-	-	121	-	-
15-19 years	124,677	21,471	66,410	29,894	3,952	-	2,950	27.8	-
15 years	7,288	2,488	4,563	-	-	-	237	-	-
16 years	15,828	3,041	12,068	322	-	-	397	2.1	-
17 years	25,113	3,941	17,294	3,199	65	-	614	13.3	-
18 years	33,806	5,115	16,470	10,692	780	-	749	34.7	-
19 years	42,642	6,886	16,015	15,681	3,107	-	953	45.1	-
20-24 years	231,475	44,992	65,256	78,955	32,008	5,189	5,075	51.3	2.3
25-29 years	203,985	42,908	44,035	60,819	33,421	18,418	4,384	56.4	9.2
30-34 years	131,369	28,317	22,464	36,321	21,855	19,637	2,775	60.5	15.3
35-39 years	58,146	14,664	8,102	14,437	9,623	9,989	1,331	59.9	17.6
40 years and over	11,962	3,990	1,488	2,696	1,648	1,843	297	53.0	15.8

- Quantity zero.

¹ Includes races other than white and black.² Includes all persons of Hispanic origin of any race.

Table 23. Percent low birthweight by weight gain of mother during pregnancy, period of gestation, and race and Hispanic origin of mother: Total of 49 reporting States and the District of Columbia, 1999

[Low birthweight is defined as weight of less than 2,500 grams (5 lb 8 oz)]

Period of gestation ¹ and race and Hispanic origin of mother	Total	Weight gain during pregnancy								
		Less than 16 pounds	16-20 pounds	21-25 pounds	26-30 pounds	31-35 pounds	36-40 pounds	41-45 pounds	46 pounds or more	Not stated
All gestation periods ²										
All races ³	7.8	13.9	10.6	8.0	6.4	5.4	5.2	5.2	5.5	11.7
White, total	6.7	11.7	9.2	7.0	5.6	4.9	4.7	4.8	5.1	9.9
White, non-Hispanic	6.7	11.8	9.5	7.1	5.6	4.9	4.7	4.8	5.2	10.6
Black, total	13.2	21.1	16.4	12.9	10.9	9.2	8.4	7.9	7.6	18.8
Black, non-Hispanic	13.3	21.2	16.5	13.1	11.0	9.3	8.5	8.0	7.7	18.9
Hispanic, total ⁴	6.8	11.3	8.3	6.6	5.5	4.8	4.6	4.4	4.5	8.6
Mexican ⁴	6.3	10.2	7.3	6.0	5.0	4.4	4.3	4.1	4.1	7.7
Puerto Rican ⁴	9.4	16.0	12.1	9.7	8.3	6.5	6.3	5.5	5.6	15.1
Cuban ⁴	6.8	12.0	10.8	7.7	6.3	5.9	4.5	4.1	4.7	14.8
Central and South American ⁴	6.4	11.6	8.4	6.1	5.2	4.7	4.5	4.5	4.5	8.2
Other and unknown Hispanic ⁴	7.8	13.8	10.7	7.6	6.1	5.5	4.8	4.4	4.8	11.8
Under 37 weeks										
All races ³	43.9	56.7	48.9	42.5	38.2	36.0	35.4	36.4	36.0	53.0
White, total	41.7	53.9	46.9	40.8	36.5	34.9	34.8	35.5	35.9	50.1
White, non-Hispanic	42.9	55.9	48.9	42.3	37.5	36.0	36.0	36.7	36.8	54.3
Black, total	50.8	62.7	54.5	48.6	44.2	40.6	38.9	40.1	37.1	60.5
Black, non-Hispanic	50.9	62.8	54.6	48.8	44.3	40.8	38.9	40.4	37.2	60.7
Hispanic ⁴	36.8	47.7	40.1	34.6	32.2	29.4	29.1	28.8	29.3	41.5
37-39 weeks										
All races ³	4.1	6.3	5.4	4.3	3.7	3.2	3.1	3.1	3.2	5.0
White, total	3.5	5.3	4.7	3.8	3.2	2.8	2.7	2.7	2.8	4.1
White, non-Hispanic	3.5	5.3	4.7	3.8	3.2	2.7	2.7	2.7	2.8	4.0
Black, total	6.8	9.6	8.3	7.0	6.2	5.6	5.0	4.9	4.7	8.3
Black, non-Hispanic	6.8	9.7	8.4	7.0	6.2	5.6	5.1	4.9	4.7	8.3
Hispanic ⁴	3.8	5.3	4.5	3.9	3.4	3.2	3.0	2.9	2.8	4.3
40 weeks and over										
All races ³	1.5	2.6	2.2	1.7	1.3	1.1	1.0	1.0	0.9	2.1
White, total	1.2	2.1	1.9	1.4	1.1	1.0	0.8	0.8	0.8	1.7
White, non-Hispanic	1.2	2.1	1.9	1.4	1.1	0.9	0.8	0.8	0.8	1.5
Black, total	2.9	4.6	3.7	3.2	2.7	2.3	2.0	1.6	1.7	4.0
Black, non-Hispanic	3.0	4.6	3.8	3.2	2.7	2.4	2.1	1.7	1.7	4.0
Hispanic ⁴	1.5	2.2	1.7	1.6	1.3	1.1	0.9	0.8	1.0	2.0

¹ Expressed in completed weeks.² Includes births with period of gestation not stated.³ Includes races other than white and black and origin not stated.⁴ Includes all persons of Hispanic origin of any race.

NOTE: Excludes data for California, which did not require reporting of weight gain during pregnancy.

Table 30. Number of live births by smoking status of mother and percent of mothers who smoked cigarettes during pregnancy, by age and Hispanic origin of mother and by race for mothers of non-Hispanic origin: Total of 48 reporting States, and the District of Columbia, 1999

Origin of mother	Smoking status				Age of mother									
	Total births	Smoker	Non-smoker	Not stated	All ages	Under 15 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-54 years
							Total	15-17 years	18-19 years					
All origins ¹	3,430,385	426,036	2,957,167	47,182	12.6	7.8	18.1	15.5	19.5	16.7	11.0	8.6	9.9	9.5
Hispanic	514,796	19,058	489,930	5,808	3.7	4.3	4.6	4.3	4.9	4.1	3.1	3.1	3.6	3.9
Mexican	323,105	8,388	310,667	4,050	2.6	3.3	3.3	3.1	3.4	2.7	2.2	2.3	3.0	3.1
Puerto Rican	55,112	5,686	48,703	723	10.5	*	10.3	9.0	11.1	11.9	9.8	9.1	9.2	11.4
Cuban	12,399	406	11,952	41	3.3	*	5.8	*	6.0	4.2	2.5	2.6	3.3	*
Central and South American	78,563	1,124	76,959	480	1.4	*	1.8	1.5	1.9	1.6	1.2	1.3	1.6	1.7
Other and unknown Hispanic	45,617	3,454	41,649	514	7.7	9.0	8.7	7.6	9.4	8.6	6.7	6.5	6.9	6.1
Non-Hispanic ²	2,871,003	400,678	2,432,865	37,460	14.1	8.9	21.7	19.0	23.0	19.6	12.3	9.2	10.6	10.2
White	2,165,609	339,724	1,796,892	28,993	15.9	20.8	30.1	28.7	30.7	23.9	13.5	9.5	10.6	9.9
Black	554,643	51,402	497,821	5,420	9.4	2.8	7.2	5.7	8.1	9.3	9.2	10.4	13.5	14.0

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.

¹ Includes origin not stated.

² Includes races other than white and black.

NOTES: Excludes data for California and South Dakota, which did not require reporting of tobacco use during pregnancy. Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified by race. See Technical notes.

Table 31. Number of live births, percent of mothers who smoked cigarettes during pregnancy, and percent distribution of average number of cigarettes smoked by mothers per day, according to educational attainment and race and Hispanic origin of mother: Total of 48 reporting States, and the District of Columbia, 1999

Smoking measure, and race and Hispanic origin of mother	Total	Years of school completed by mother					
		0-8 years	9-11 years	12 years	13-15 years	16 years or more	Not Stated
All births							
All races ¹	3,430,385	159,931	529,765	1,101,150	753,833	829,961	55,745
White, total	2,702,289	138,200	377,250	836,155	595,963	715,892	38,829
White, non-Hispanic	2,165,609	38,719	238,431	681,211	521,578	665,337	20,333
Black, total	570,478	14,939	133,217	220,026	127,366	62,963	11,967
Black, non-Hispanic	554,643	13,681	129,633	214,581	124,396	61,414	10,938
Hispanic ²	514,796	100,476	138,635	150,518	70,078	41,281	13,808
Percent							
Smoker	12.6	11.0	25.6	16.7	9.4	2.1	12.3
White, total	13.6	11.2	29.2	19.1	10.4	2.2	12.9
White, non-Hispanic	15.9	34.0	42.4	22.4	11.3	2.3	18.9
Black, total	9.3	10.9	16.5	8.9	5.5	1.9	12.5
Black, non-Hispanic	9.4	11.4	16.7	9.0	5.5	1.9	12.6
Hispanic ²	3.7	2.2	5.8	3.9	3.1	1.1	3.3
Percent distribution ³							
All races ¹							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	70.1	64.7	70.0	69.3	71.8	76.2	73.1
11-20 cigarettes	26.5	29.6	26.3	27.3	25.3	21.5	23.6
21 cigarettes or more	3.5	5.7	3.7	3.3	2.9	2.3	3.3
White, total							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	67.7	62.4	66.8	67.1	70.2	75.3	69.5
11-20 cigarettes	28.5	31.5	29.1	29.3	26.7	22.2	26.5
21 cigarettes or more	3.7	6.2	4.2	3.6	3.1	2.5	3.9
White, non-Hispanic							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	66.8	58.6	65.4	66.6	69.8	75.0	67.9
11-20 cigarettes	29.3	34.5	30.3	29.8	27.1	22.5	28.0
21 cigarettes or more	3.9	6.9	4.3	3.6	3.2	2.5	4.1
Black, total							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	84.1	82.0	83.9	84.5	83.9	84.8	83.4
11-20 cigarettes	14.2	15.3	14.2	14.0	14.6	14.2	14.8
21 cigarettes or more	1.7	2.7	2.0	1.5	1.5	*	1.8
Black, non-Hispanic							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	84.0	82.3	83.8	84.5	83.9	84.9	83.3
11-20 cigarettes	14.3	15.0	14.2	14.1	14.7	14.1	14.9
21 cigarettes or more	1.7	2.7	2.0	1.4	1.5	*	*
Hispanic ²							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	84.3	84.8	85.0	83.9	82.5	84.6	83.8
11-20 cigarettes	14.0	13.1	13.3	14.5	16.4	14.1	14.0
21 cigarettes or more	1.6	2.1	1.7	1.6	1.1	*	*

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.

¹ Includes races other than white and black and origin not stated.² Includes all persons of Hispanic origin of any race.³ Excludes data for Indiana and New York State (but includes New York City) which did not report average number of cigarettes smoked per day in standard categories.

NOTE: Excludes data for California and South Dakota, which did not require reporting of tobacco use during pregnancy.

Table 32. Percent low birthweight by smoking status, age, and race and Hispanic origin of mother: Total of 48 reporting States, and the District of Columbia, 1999

[Low birthweight is defined as weight of less than 2,500 grams (5 lb 8 oz)]

Smoking status and race of mother	All ages	Age of mother								
		Under 15 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-54 years
			Total	15-17 years	18-19 years					
All races ¹										
Total	7.8	13.4	9.9	10.8	9.5	7.8	6.9	7.1	8.6	10.6
Smoker	12.1	15.7	11.6	12.4	11.3	10.6	11.5	13.2	16.7	19.3
Nonsmoker	7.2	13.2	9.6	10.5	9.0	7.3	6.3	6.6	7.7	9.7
Not stated	9.5	*	10.9	11.2	10.8	8.9	8.9	9.1	10.5	15.0
White, total										
Total	6.7	11.5	8.4	9.2	8.1	6.6	6.0	6.3	7.5	9.4
Smoker	10.8	15.1	10.9	11.6	10.6	9.8	10.2	11.4	14.4	16.4
Nonsmoker	6.1	11.1	7.7	8.5	7.2	5.8	5.4	5.8	6.7	8.6
Not stated	8.5	*	10.0	10.5	9.8	7.8	7.9	8.3	9.4	13.3
White, non-Hispanic										
Total	6.7	11.6	8.5	9.3	8.2	6.7	6.0	6.3	7.4	9.3
Smoker	10.8	15.7	10.8	11.6	10.5	9.8	10.2	11.2	14.3	16.3
Nonsmoker	5.9	10.5	7.5	8.3	7.1	5.7	5.4	5.7	6.6	8.5
Not stated	8.7	*	10.3	11.1	9.9	8.0	8.2	8.4	9.4	12.8
Black, total										
Total	13.2	15.5	13.8	14.3	13.5	12.3	12.3	13.6	16.1	18.3
Smoker	21.0	19.4	17.3	18.0	17.0	16.7	21.5	25.0	29.2	32.8
Nonsmoker	12.4	15.4	13.5	14.1	13.1	11.8	11.3	12.3	14.0	15.9
Not stated	16.4	*	15.1	13.9	15.8	14.6	16.4	17.6	21.8	24.2
Black, non-Hispanic										
Total	13.3	15.6	13.9	14.3	13.6	12.4	12.5	13.8	16.3	18.4
Smoker	21.1	19.4	17.4	18.0	17.1	16.7	21.6	25.1	29.4	32.9
Nonsmoker	12.5	15.4	13.6	14.1	13.3	11.9	11.5	12.4	14.2	15.9
Not stated	16.5	*	15.3	14.2	15.8	14.5	16.5	18.0	22.4	25.2
Hispanic ²										
Total	6.8	11.5	8.3	9.1	7.8	6.4	5.9	6.6	8.1	10.1
Smoker	11.8	*	11.7	12.2	11.4	10.6	10.8	13.8	15.4	17.3
Nonsmoker	6.6	11.4	8.1	8.9	7.5	6.2	5.7	6.3	7.7	9.6
Not stated	8.3	*	9.5	9.4	9.5	7.7	7.4	7.8	9.8	15.4

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.

¹ Includes races other than white and black and origin not stated.² Includes all persons of Hispanic origin of any race.

NOTE: Excludes data for California and South Dakota, which did not require reporting of tobacco use during pregnancy.

Table 33. Live births by month of pregnancy prenatal care began and percent of mothers beginning care in the first trimester and percent with late or no care, by age and race and Hispanic origin of mother: United States, 1999 --Con.

Age and race and Hispanic origin of mother	All births	Month of pregnancy prenatal care began									Percent	
		1st trimester			2d trimester		Late or no care			Not stated	1st trimester	Late or no care
		Total	1st and 2d months	3d month	4th-6th months	Total	7th-9th months	No care				
Black, non-Hispanic	588,981	418,140	309,771	108,369	108,654	37,280	23,105	14,175	24,907	74.1	6.6	
Under 15 years	3,890	1,593	981	612	1,484	627	455	172	186	43.0	16.9	
15-19 years	118,285	72,658	48,777	23,881	31,177	9,636	6,487	3,149	4,814	64.0	8.5	
15 years	7,698	3,754	2,322	1,432	2,664	912	626	286	368	51.2	12.4	
16 years	14,573	7,895	5,048	2,847	4,634	1,409	981	428	635	56.6	10.1	
17 years	22,580	13,454	8,773	4,681	6,272	1,912	1,306	606	942	62.2	8.8	
18 years	32,155	20,262	13,626	6,636	8,172	2,444	1,683	761	1,277	65.6	7.9	
19 years	41,279	27,293	19,008	8,285	9,435	2,959	1,891	1,068	1,592	68.8	7.5	
20-24 years	188,247	131,431	95,964	35,467	37,499	12,062	7,758	4,304	7,255	72.6	6.7	
25-29 years	134,784	102,488	78,942	23,546	19,806	6,879	4,119	2,760	5,611	79.3	5.3	
30-34 years	88,403	68,454	53,278	15,176	11,080	4,697	2,588	2,109	4,172	81.3	5.6	
35-39 years	45,746	34,640	26,635	8,005	6,082	2,711	1,369	1,342	2,313	79.8	6.2	
40 years and over	9,626	6,876	5,194	1,682	1,526	668	329	339	556	75.8	7.4	
Hispanic ²	764,339	548,580	396,758	151,822	142,091	46,232	33,598	12,634	27,436	74.4	6.3	
Under 15 years	2,725	1,308	813	495	905	387	260	127	125	50.3	14.9	
15-19 years	124,677	77,605	52,179	25,426	31,721	10,689	7,705	2,984	4,662	64.7	8.9	
15 years	7,288	4,079	2,527	1,552	2,175	774	551	223	260	58.0	11.0	
16 years	15,828	9,271	5,981	3,290	4,449	1,504	1,054	450	604	60.9	9.9	
17 years	25,113	15,359	10,284	5,075	6,529	2,282	1,624	658	943	63.5	9.4	
18 years	33,806	21,310	14,392	6,918	8,509	2,765	2,015	750	1,222	65.4	8.5	
19 years	42,642	27,586	18,995	8,591	10,059	3,364	2,461	903	1,633	67.3	8.2	
20-24 years	231,475	159,829	113,319	46,510	47,064	15,996	11,655	4,341	8,586	71.7	7.2	
25-29 years	203,985	153,576	113,314	40,262	33,151	10,374	7,611	2,763	6,884	77.9	5.3	
30-34 years	131,369	102,341	76,965	25,376	18,830	5,600	4,043	1,557	4,598	80.7	4.4	
35-39 years	58,146	45,036	33,718	11,318	8,421	2,580	1,874	706	2,109	80.4	4.6	
40 years and over	11,962	8,885	6,450	2,435	1,999	606	450	156	472	77.3	5.3	

¹ Includes races other than white and black and origin not stated.² Includes all persons of Hispanic origin of any race.

Table 35. Live births by month of pregnancy prenatal care began, number of prenatal visits, and median number of visits, by race and Hispanic origin of mother: United States, 1999 --Con.

Number of prenatal visits and race and Hispanic origin of mother	All births	Month of pregnancy prenatal care began							Not stated
		1st trimester			2d trimester		Late or no care		
		Total	1st and 2d months	3d month	4th-6th months	Total	7th-9th months	No care	
Black, non-Hispanic	588,981	418,140	309,771	108,369	108,654	37,280	23,105	14,175	24,907
No visits	14,175	14,175	...	14,175	...
1-2 visits	11,654	2,866	1,910	956	3,231	4,903	4,903	...	654
3-4 visits	21,608	6,235	3,590	2,645	8,376	6,287	6,287	...	710
5-6 visits	38,969	15,442	9,228	6,214	17,095	5,530	5,530	...	902
7-8 visits	55,803	29,276	17,523	11,753	22,547	2,971	2,971	...	1,009
9-10 visits	115,543	83,585	54,071	29,514	28,656	1,676	1,676	...	1,626
11-12 visits	124,630	108,364	80,462	27,902	14,802	583	583	...	881
13-14 visits	74,901	69,204	56,483	12,721	5,040	215	215	...	442
15-16 visits	62,880	58,538	49,840	8,698	3,820	154	154	...	368
17-18 visits	12,773	12,036	10,077	1,959	627	33	33	...	77
19 visits or more	21,830	20,124	17,031	3,093	1,456	84	84	...	166
Not stated	34,215	12,470	9,556	2,914	3,004	669	669	...	18,072
Median number of visits	11.8	12.5	12.7	11.2	9.2	5.0	5.0	...	9.3
Hispanic ²	764,339	548,580	396,758	151,822	142,091	46,232	33,598	12,634	27,436
No visits	12,634	12,634	...	12,634	...
1-2 visits	11,792	2,679	1,747	932	2,633	5,990	5,990	...	490
3-4 visits	24,332	6,319	3,467	2,852	8,545	8,739	8,739	...	729
5-6 visits	48,058	17,303	9,269	8,034	21,048	8,723	8,723	...	984
7-8 visits	77,792	40,432	23,274	17,158	31,079	4,939	4,939	...	1,342
9-10 visits	162,407	117,556	73,837	43,719	40,200	2,657	2,657	...	1,994
11-12 visits	167,443	145,168	106,051	39,117	20,184	908	908	...	1,183
13-14 visits	100,019	92,387	74,350	18,037	6,729	393	393	...	510
15-16 visits	82,714	76,312	63,598	12,714	5,737	287	287	...	378
17-18 visits	15,984	15,022	12,751	2,271	825	50	50	...	87
19 visits or more	21,588	19,894	16,968	2,926	1,419	96	96	...	179
Not stated	39,576	15,508	11,446	4,062	3,692	816	816	...	19,560
Median number of visits	11.6	12.4	12.7	11.1	9.4	5.4	5.4	...	9.7

... Category not applicable.

¹ Includes races other than white and black and origin not stated.² Includes all persons of Hispanic origin of any race.

Table 36. Live births to mothers with selected obstetric procedures and rates by age of mother, by race of mother: United States, 1999

[Rates are number of live births with specified procedure per 1,000 live births in specified group]

Obstetric procedure and race of mother	All births	Obstetric procedure reported	Age of mother							Not stated ¹
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years	
All races ²										
Amniocentesis	3,959,417	103,874	26.5	6.8	8.6	11.6	21.8	109.7	156.0	42,734
Electronic fetal monitoring	3,959,417	3,296,037	841.5	851.9	846.7	844.2	837.2	826.4	813.4	42,734
Induction of labor	3,959,417	775,245	197.9	182.7	195.2	206.0	201.4	194.9	192.7	42,734
Stimulation of labor	3,959,417	702,784	179.4	192.9	184.4	182.2	175.2	161.0	149.9	42,734
Tocolysis	3,959,417	92,342	23.6	25.4	24.2	23.4	22.8	22.4	22.7	42,734
Ultrasound	3,959,417	2,579,276	658.5	630.4	646.7	665.0	672.4	671.0	664.8	42,734
White										
Amniocentesis	3,132,501	87,511	28.2	6.9	8.8	11.7	22.4	114.6	166.2	33,113
Electronic fetal monitoring	3,132,501	2,614,055	843.4	853.3	847.6	846.8	840.2	829.1	815.0	33,113
Induction of labor	3,132,501	648,095	209.1	194.6	207.5	217.2	211.1	203.9	200.8	33,113
Stimulation of labor	3,132,501	566,588	182.8	200.5	189.5	184.9	177.6	163.4	153.1	33,113
Tocolysis	3,132,501	73,884	23.8	26.5	24.7	23.6	23.0	22.4	22.0	33,113
Ultrasound	3,132,501	2,081,638	671.6	648.0	660.9	676.6	682.6	681.2	676.4	33,113
Black										
Amniocentesis	605,970	9,296	15.5	6.3	7.8	11.2	17.0	64.7	89.4	4,468
Electronic fetal monitoring	605,970	508,057	844.6	853.7	850.0	842.7	834.6	828.6	823.0	4,468
Induction of labor	605,970	95,500	158.8	154.5	156.9	162.7	160.6	161.4	164.2	4,468
Stimulation of labor	605,970	97,708	162.4	175.5	167.4	160.5	151.1	141.5	134.0	4,468
Tocolysis	605,970	13,477	22.4	21.6	21.8	22.7	23.2	23.8	26.6	4,468
Ultrasound	605,970	362,419	602.5	586.9	599.9	610.3	612.3	611.9	607.9	4,468

¹ No response reported for the obstetric procedures item.² Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 39. Live births by method of delivery and rates of cesarean delivery and vaginal birth after previous cesarean delivery, by race and Hispanic origin of mother: United States, 1989-99 --Con.

Year and race and Hispanic origin of mother	Births by method of delivery							Cesarean delivery rate		Rate of vaginal birth after previous cesarean ³
	All births	Vaginal		Cesarean			Not stated	Total ¹	Primary ²	
		Total	After previous cesarean	Total	Primary	Repeat				
Black, non-Hispanic										
1999	588,981	449,580	14,999	135,508	85,898	49,610	3,893	23.2	16.5	23.2
1998	593,127	457,186	16,510	131,999	84,169	47,830	3,942	22.4	16.0	25.7
1997	581,431	451,744	16,353	126,138	80,599	45,539	3,549	21.8	15.6	26.4
1996	578,099	449,544	16,322	124,836	80,457	44,379	3,719	21.7	15.7	26.9
1995	587,781	457,104	15,721	127,171	82,395	44,776	3,506	21.8	15.7	26.0
1994	619,198	480,551	16,478	134,526	86,411	48,115	4,121	21.9	15.7	25.5
1993	641,273	496,333	15,675	139,702	89,315	50,387	5,238	22.0	15.7	23.7
1992 ⁸	657,450	502,669	14,950	143,153	91,086	52,067	11,628	22.2	15.7	22.3
1991 ⁸	666,758	507,522	13,847	142,417	90,664	51,753	16,819	21.9	15.5	21.1
1990 ^{5,9}	661,701	503,720	13,157	142,838	91,175	51,663	15,143	22.1	15.7	20.3
1989 ^{6,10}	611,269	440,310	10,726	125,290	81,177	44,113	45,669	22.2	15.9	19.6
Hispanic⁷										
1999	764,339	599,118	16,915	161,035	94,433	66,602	4,186	21.2	14.0	20.3
1998	734,661	580,143	17,803	150,317	88,763	61,554	4,201	20.6	13.6	22.4
1997	709,767	563,114	17,942	142,907	84,410	58,497	3,746	20.2	13.4	23.5
1996	701,339	558,105	18,491	139,554	83,392	56,162	3,680	20.0	13.4	24.8
1995	679,768	539,731	17,396	136,640	82,662	53,978	3,397	20.2	13.7	24.4
1994	665,026	525,928	16,206	135,569	81,961	53,608	3,529	20.5	13.9	23.2
1993	654,418	514,493	14,586	136,279	82,576	53,703	3,646	20.9	14.2	21.4
1992 ⁸	643,271	494,338	13,111	133,369	81,211	52,158	15,564	21.2	14.4	20.1
1991 ⁸	623,085	472,126	11,615	129,752	80,228	49,524	21,207	21.6	14.8	19.0
1990 ^{5,9}	595,073	458,242	10,395	122,969	76,027	46,942	13,862	21.2	14.5	18.1
1989 ^{6,10}	532,249	385,462	8,549	105,268	64,905	40,363	41,519	21.5	14.7	17.5

¹ Percent of all live births by cesarean delivery.

² Number of primary cesareans per 100 live births to women who have not had a previous cesarean.

³ Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.

⁴ Includes races other than white and black and origin not stated.

⁵ Excludes data for Oklahoma, which did not report method of delivery on the birth certificate.

⁶ Excludes data for Louisiana, Maryland, Nebraska, Nevada, and Oklahoma, which did not report method of delivery on the birth certificate.

⁷ Includes all persons of Hispanic origin of any race.

⁸ Excludes data for New Hampshire which did not report Hispanic origin.

⁹ Excludes data for New Hampshire and Oklahoma which did not report Hispanic origin.

¹⁰ Excludes data for Louisiana, New Hampshire, and Oklahoma, which did not report Hispanic origin.

Table 42. Rates of cesarean delivery and vaginal birth after previous cesarean delivery, by selected maternal medical risk factors and complications of labor and/or delivery: United States, 1999

Medical risk factor and complication	All births to mothers with specified condition and/or procedure	Cesarean delivery rate		Rate of vaginal birth after previous cesarean ³
		Total ¹	Primary ²	
Medical risk factors				
Anemia	90,322	22.2	15.5	27.3
Cardiac disease	20,189	26.1	19.1	27.0
Acute or chronic lung disease	43,117	25.4	18.4	26.5
Diabetes	106,413	37.2	26.7	17.2
Genital herpes ⁴	33,636	34.5	28.4	27.0
Hydramnios/Oligohydramnios	52,704	36.7	31.3	22.4
Hemoglobinopathy	3,165	25.8	18.7	25.3
Hypertension, chronic	27,912	41.2	31.5	15.1
Hypertension, pregnancy-associated	148,837	36.9	31.7	18.0
Eclampsia	11,993	49.1	44.6	14.4
Incompetent cervix	11,344	35.3	27.8	21.8
Renal disease	11,038	26.1	19.1	26.3
Rh sensitization ⁵	25,448	22.8	16.1	26.6
Uterine bleeding ⁴	22,332	32.6	25.9	22.7
Complications of labor and/or delivery				
Febrile	59,904	29.7	28.0	47.4
Meconium, moderate/heavy	213,698	20.5	17.7	45.1
Premature rupture of membrane	100,130	25.6	22.4	37.2
Abruptio placenta	21,999	59.5	55.0	15.7
Placenta previa	12,492	81.7	77.7	3.6
Other excessive bleeding	21,930	26.5	20.9	32.2
Seizures during labor	1,331	52.2	49.9	*
Precipitous labor (less than 3 hours)	77,848	2.5	1.6	78.3
Prolonged labor (more than 20 hours)	30,683	36.3	34.8	42.5
Dysfunctional labor	105,795	67.3	65.3	15.4
Breech/Malpresentation	152,084	84.5	82.9	5.0
Cephalopelvic disproportion	71,604	96.4	96.0	1.2
Cord prolapse	7,773	65.6	63.5	14.6
Anesthetic complication	2,299	40.1	32.4	19.5
Fetal distress	140,756	57.5	55.1	20.6

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in numerator.

¹ Percent of all live births by cesarean delivery.

² Number of primary cesareans per 100 live births to women who have not had a previous cesarean.

³ Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.

⁴ Texas does not report this risk factor.

⁵ Kansas does not report this risk factor.

Table 44. Percent of live births very preterm and preterm and percent of live births of very low birthweight and low birthweight, by race and Hispanic origin of mother: United States, 1981-99

Year	Very preterm ¹						Preterm ²					
	All races ³	White		Black		Hispanic ⁴	All races ³	White		Black		Hispanic ⁴
		Total	Non-Hispanic	Total	Non-Hispanic			Total	Non-Hispanic	Total	Non-Hispanic	
1999	1.96	1.57	1.54	4.13	4.18	1.68	11.8	10.7	10.5	17.5	17.6	11.4
1998	1.96	1.57	1.52	4.11	4.15	1.72	11.6	10.5	10.2	17.5	17.6	11.4
1997	1.94	1.53	1.49	4.17	4.19	1.68	11.4	10.2	9.9	17.5	17.6	11.2
1996	1.89	1.48	1.43	4.13	4.17	1.66	11.0	9.8	9.5	17.4	17.5	10.9
1995	1.89	1.46	1.41	4.25	4.29	1.66	11.0	9.7	9.4	17.7	17.8	10.9
1994	1.91	1.45	1.39	4.32	4.36	1.67	11.0	9.6	9.3	18.1	18.2	10.9
1993	1.93	1.45	1.39	4.41	4.45	1.67	11.0	9.5	9.1	18.5	18.6	11.0
1992 ⁷	1.91	1.40	1.33	4.47	4.50	1.64	10.7	9.1	8.7	18.4	18.5	10.7
1991 ⁷	1.94	1.41	1.35	4.62	4.65	1.65	10.8	9.1	8.7	18.9	19.0	11.0
1990 ⁸	1.92	1.39	1.33	4.61	4.63	1.69	10.6	8.9	8.5	18.8	18.9	11.0
1989 ⁹	1.95	1.41	1.34	4.64	4.68	1.76	10.6	8.8	8.4	18.9	19.0	11.1
1988	1.96	1.42	---	4.72	---	---	10.2	8.5	---	18.7	---	---
1987	1.96	1.44	---	4.61	---	---	10.2	8.5	---	18.4	---	---
1986	1.90	1.41	---	4.47	---	---	10.0	8.4	---	18.0	---	---
1985	1.88	1.42	---	4.37	---	---	9.8	8.2	---	17.8	---	---
1984	1.83	1.38	---	4.22	---	---	9.4	7.9	---	17.1	---	---
1983	1.86	1.40	---	4.34	---	---	9.6	8.0	---	17.7	---	---
1982	1.84	1.40	---	4.22	---	---	9.5	8.0	---	17.4	---	---
1981	1.81	1.37	---	4.13	---	---	9.4	7.9	---	17.3	---	---

Year	Very low birthweight ⁵						Low birthweight ⁶					
	All races ³	White		Black		Hispanic ⁴	All races ³	White		Black		Hispanic ⁴
		Total	Non-Hispanic	Total	Non-Hispanic			Total	Non-Hispanic	Total	Non-Hispanic	
1999	1.45	1.15	1.15	3.14	3.18	1.14	7.6	6.6	6.6	13.1	13.2	6.4
1998	1.45	1.15	1.15	3.08	3.11	1.15	7.6	6.5	6.6	13.0	13.2	6.4
1997	1.42	1.13	1.12	3.04	3.05	1.13	7.5	6.5	6.5	13.0	13.1	6.4
1996	1.37	1.09	1.08	2.99	3.02	1.12	7.4	6.3	6.4	13.0	13.1	6.3
1995	1.35	1.06	1.04	2.97	2.98	1.11	7.3	6.2	6.2	13.1	13.2	6.3
1994	1.33	1.02	1.01	2.96	2.99	1.08	7.3	6.1	6.1	13.2	13.3	6.2
1993	1.33	1.01	1.00	2.96	2.99	1.06	7.2	6.0	5.9	13.3	13.4	6.2
1992 ⁷	1.29	0.96	0.94	2.96	2.97	1.04	7.1	5.8	5.7	13.3	13.4	6.1
1991 ⁷	1.29	0.96	0.94	2.96	2.97	1.02	7.1	5.8	5.7	13.6	13.6	6.1
1990 ⁸	1.27	0.95	0.93	2.92	2.93	1.03	7.0	5.7	5.6	13.3	13.3	6.1
1989 ⁹	1.28	0.95	0.93	2.95	2.97	1.05	7.0	5.7	5.6	13.5	13.6	6.2
1988	1.24	0.93	---	2.86	---	---	6.9	5.7	---	13.3	---	---
1987	1.24	0.94	---	2.79	---	---	6.9	5.7	---	13.0	---	---
1986	1.21	0.93	---	2.73	---	---	6.8	5.7	---	12.8	---	---
1985	1.21	0.93	---	2.71	---	---	6.8	5.7	---	12.6	---	---
1984	1.19	0.93	---	2.60	---	---	6.7	5.6	---	12.6	---	---
1983	1.19	0.92	---	2.60	---	---	6.8	5.7	---	12.8	---	---
1982	1.18	0.91	---	2.56	---	---	6.8	5.6	---	12.6	---	---
1981	1.16	0.91	---	2.52	---	---	6.8	5.7	---	12.7	---	---

--- Data not available.

¹ Births of less than 32 completed weeks of gestation.² Births of less than 37 completed weeks of gestation.³ Includes races other than white and black and origin not stated.⁴ Includes all persons of Hispanic origin of any race.⁵ Less than 1,500 grams (3 lb. 4 oz.).⁶ Less than 2,500 grams (5 lb. 8 oz.).⁷ Data by Hispanic origin exclude New Hampshire, which did not report Hispanic origin.⁸ Data by Hispanic origin exclude New Hampshire and Oklahoma, which did not report Hispanic origin.⁹ Data by Hispanic origin exclude New Hampshire, Oklahoma, and Louisiana, which did not report Hispanic origin.

Table 48. Live births with selected abnormal conditions of the newborn and rates by age of mother, by race of mother: United States, 1999

[Rates are number of live births with specified abnormal condition per 1,000 live births in specified group]

Abnormal condition and race of mother	All births ¹	Abnormal condition reported	Age of mother							Not stated ²
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years	
All races ³										
Anemia	3,959,417	4,191	1.1	1.1	1.0	1.0	1.1	1.2	1.4	100,783
Birth injury ⁴	3,586,265	9,980	2.9	2.8	2.9	3.0	2.8	2.9	2.5	103,435
Fetal alcohol syndrome ⁵	3,891,209	148	0.0	*	0.0	0.0	0.0	0.1	*	101,892
Hyaline membrane disease/RDS	3,959,417	24,147	6.3	6.9	6.3	6.1	6.0	6.4	7.3	100,783
Meconium aspiration syndrome	3,959,417	7,681	2.0	2.2	2.1	1.9	1.8	2.0	2.1	100,783
Assisted ventilation less than 30 minutes ⁶	3,840,078	79,898	21.4	21.9	20.6	21.3	21.5	22.3	23.8	109,831
Assisted ventilation 30 minutes or longer ⁶	3,840,078	36,712	9.8	11.2	9.5	9.1	9.6	10.8	13.3	109,831
Seizures	3,959,417	2,102	0.5	0.6	0.6	0.5	0.5	0.5	0.6	100,783
White										
Anemia	3,132,501	3,095	1.0	1.0	1.0	1.0	1.0	1.1	1.4	75,931
Birth injury ⁴	2,812,735	8,230	3.0	3.0	3.1	3.1	2.9	2.9	2.5	78,079
Fetal alcohol syndrome ⁵	3,073,731	80	0.0	*	*	0.0	*	*	*	76,973
Hyaline membrane disease/RDS	3,132,501	19,406	6.3	7.1	6.4	6.2	6.0	6.4	7.2	75,931
Meconium aspiration syndrome	3,132,501	5,534	1.8	2.1	1.9	1.8	1.7	1.8	2.0	75,931
Assisted ventilation less than 30 minutes ⁶	3,065,587	65,053	21.8	22.3	20.9	21.8	21.8	22.9	24.4	83,194
Assisted ventilation 30 minutes or longer ⁶	3,065,587	28,407	9.5	10.8	9.1	8.9	9.3	10.5	13.0	83,194
Seizures	3,132,501	1,638	0.5	0.6	0.5	0.5	0.5	0.5	0.6	75,931
Black										
Anemia	605,970	869	1.5	1.4	1.3	1.5	1.5	2.3	2.1	13,771
Birth injury ⁴	564,605	955	1.7	1.7	1.7	1.8	1.7	1.9	*	14,083
Fetal alcohol syndrome ⁵	599,465	50	0.1	*	*	*	0.2	*	*	13,818
Hyaline membrane disease/RDS	605,970	3,926	6.6	6.5	6.3	6.3	7.0	7.8	10.5	13,771
Meconium aspiration syndrome	605,970	1,689	2.9	2.6	2.7	2.9	3.1	3.4	3.1	13,771
Assisted ventilation less than 30 minutes ⁶	567,257	10,942	19.8	20.0	19.4	19.4	20.7	20.3	22.1	14,724
Assisted ventilation 30 minutes or longer ⁶	567,257	6,754	12.2	12.1	11.0	11.9	13.2	16.0	18.3	14,724
Seizures	605,970	368	0.6	0.6	0.6	0.6	0.6	0.6	*	13,771

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.

0.0 Quantity more than zero but less than 0.05.

¹ Total number of births to residents of areas reporting specified condition.² No response reported for the abnormal conditions item.³ Includes races other than white and black.⁴ Nebraska and Texas do not report this condition.⁵ Wisconsin does not report this condition.⁶ New York City does not report this condition.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 49. Live births with selected congenital anomalies and rates by age of mother, by race of mother: Total of 49 reporting States and the District of Columbia, 1999 --Con.

[Rates are number of live births with specified congenital anomaly per 100,000 live births in specified group]

Congenital anomaly and race of mother	All births ¹	Congenital anomaly reported	Age of mother							Not stated ²	
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years		
Black											
Anencephalus	605,473	65	10.9	*	*	*	*	*	*	*	8,593
Spina bifida/Meningocele	605,473	116	19.4	17.0	17.9	15.4	24.4	*	*	*	8,593
Hydrocephalus	605,473	139	23.3	20.3	22.1	18.3	28.8	*	*	*	8,593
Microcephalus	605,473	40	6.7	*	*	*	*	*	*	*	8,593
Other central nervous system anomalies	605,473	95	15.9	16.2	15.8	19.0	*	*	*	*	8,593
Heart malformations	605,473	731	122.5	94.0	105.7	128.0	114.3	231.6	284.6	*	8,593
Other circulatory/respiratory anomalies	605,473	820	137.4	117.6	126.7	135.3	152.0	203.7	*	*	8,593
Rectal atresia/stenosis	605,473	40	6.7	*	*	*	*	*	*	*	8,593
Tracheo-esophageal fistula/Esophageal atresia	605,473	59	9.9	*	*	*	*	*	*	*	8,593
Omphalocele/Gastroschisis	605,473	237	39.7	55.9	37.9	31.5	34.4	47.2	*	*	8,593
Other gastrointestinal anomalies	605,473	188	31.5	29.2	26.3	37.3	28.8	45.0	*	*	8,593
Malformed genitalia	605,473	297	49.8	49.5	47.3	41.0	63.2	53.6	*	*	8,593
Renal agenesis	605,473	76	12.7	*	12.6	*	*	*	*	*	8,593
Other urogenital anomalies	605,473	418	70.0	66.5	64.1	75.3	72.1	83.6	*	*	8,593
Cleft lip/palate	605,473	260	43.6	47.8	37.3	41.7	44.4	55.8	*	*	8,593
Polydactyly/Syndactyly/Adactyly	605,473	1,386	232.2	231.9	241.8	228.9	214.1	225.2	294.8	*	8,593
Clubfoot	605,473	215	36.0	39.7	38.9	32.2	25.5	45.0	*	*	8,593
Diaphragmatic hernia	605,473	65	10.9	*	*	*	*	*	*	*	8,593
Other musculoskeletal/integumental anomalies	605,473	1,995	334.2	296.7	299.1	328.4	389.4	456.8	477.8	*	8,593
Down's syndrome	605,473	153	25.6	21.1	12.6	*	*	87.9	294.8	*	8,593
Other chromosomal anomalies	605,473	154	25.8	18.6	23.7	15.4	33.3	47.2	*	*	8,593

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.

¹ Total number of births.² No response reported for the congenital anomalies item.³ Includes races other than white and black.

NOTES: Excludes data for New Mexico, which did not report congenital anomalies. Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Technical notes

Source of data

Data shown in this report for 1999 are based on 100 percent of the birth certificates in all States and the District of Columbia. The data are provided to the National Center for Health Statistics (NCHS) through the Vital Statistics Cooperative Program (VSCP). In 1984 and earlier years, the VSCP included varying numbers of States that provided data based on 100 percent of their birth certificates. Data for States not in the VSCP were based on a 50-percent sample of birth certificates filed in those States. Information on sampling procedures and sampling errors for 1984 and earlier years is provided in the annual report, *Vital Statistics of the United States, Volume I, Natality, Technical Appendix (4)*. Information on the percent of records with missing information for maternal and infant characteristics included in this report is shown by State in [table I](#). Data are not shown for the variables race, age, and marital status of mother. Missing data are imputed in these cases; see separate sections in the [Technical notes](#) for more information.

Age of mother

Age of mother is computed in most cases from the mother's and infant's dates of birth as reported on the birth certificate. The mother's age is directly reported by five States (Kentucky, Nevada, North Dakota, Virginia, Wyoming), and American Samoa. From 1964 to 1996, mother's age was edited for ages 10–49 years. Births reported to occur to mothers younger than age 10 or older than age 49 years had age imputed according to the age of mother from the previous record with the same race and total birth order (total of live births and fetal deaths). Beginning in 1997, age of mother is edited for ages 10–54 years. A review and verification of unedited birth data for 1996 showed that the vast majority of births reported as occurring to women aged 50 years and over were to women aged 50–54 years. The numbers of births to women aged 50–54 years are too small for computing age-specific birth rates. These births have been included with births to women aged 45–49 years for computing birth rates.

In 1999 age of mother was not reported on 0.02 percent of the records; for these records age of mother was imputed according to the last record with the same race and total birth order.

Race and Hispanic origin

Race and Hispanic origin are reported separately on the birth certificate. Beginning with the 1989 data year, NCHS started tabulating its birth data primarily by race of the mother. In 1988 and prior years, births were tabulated by the race of the child, which was determined from the race of the parents as entered on the birth certificate.

Trend data by race shown in this report are by race of mother for all years beginning with the 1980 data year. In order to facilitate continuity and analysis of the data, trend tables showing data for years prior to 1980 show data for both race of mother and race of child for 1980. This makes it possible to distinguish the effects of this change from real changes in the data. The text discussions of data by race are based on tabulations by race of mother. Text references to white births and white mothers or black births and black mothers are used interchangeably for ease in writing.

The factors influencing the decision to tabulate births by race of the mother have been discussed in detail elsewhere (92). They include the 1989 revision of the birth certificate, which includes many more health questions that are directly associated with the mother. In these instances, it is more appropriate to tabulate births by the mother's race. A second factor has been the increasing incidence of interracial parentage. In 1999, 5.3 percent of births were to parents of different races compared with just 2.2 percent 20 years earlier. A third factor influencing the decision to tabulate births by race of mother is the large proportion of births with race of father not stated, 14 percent in 1999. Although this proportion declined slightly in the 1990's, it is still higher than in 1979, 11 percent. The high proportion of records with the father's race not reported reflects the increase in the proportion of births to unmarried women; in many such cases, no information is reported on the father. These births are already assigned the race of the mother because there is no alternative. Tabulating all births by race of mother, therefore, provides for a more uniform approach, rather than a necessarily arbitrary combination of parental races.

Race of mother is reported by all registration areas in eight categories: white, black, American Indian, Chinese, Japanese, Hawaiian, Filipino, and "other" Asian or Pacific Islander (API). In addition, 11 States (California, Hawaii, Illinois, Minnesota, Missouri, New Jersey, New York, Texas, Virginia, Washington, and West Virginia) report data on API subgroups included in the "other" API category (Vietnamese, Asian Indian, Korean, Samoan, Guamanian, and remaining API). A report on births in 1992 to women in these API subgroups has been published (93).

In 1999 race of mother was not reported for 0.6 percent of births. In these cases, if the race of the father was known, the race of the father was assigned to the mother. When information was not available for either parent, the race of the mother was imputed according to the specific race of the mother on the preceding record with a known race of mother. This was necessary for just 0.4 percent of births in 1999.

Hispanic origin and race are reported independently on the birth certificate, as noted previously. Data for Hispanic subgroups are shown in most cases for five groups: Mexican, Puerto Rican, Cuban, Central and South American, and other (and unknown) Hispanic. In tabulations of birth data by race only, data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race. In tabulations of birth data by race and Hispanic origin, data for persons of Hispanic origin are not further classified by race because the vast majority of births to Hispanic women are reported as white (97 percent in 1999). In these tabulations, data for non-Hispanic persons are classified according to the race of the mother because there are substantial differences in fertility and maternal and infant health between Hispanic and non-Hispanic white women.

Items asking for the Hispanic origin of the mother and the father have been included on the birth certificates of all States and the District of Columbia, the Virgin Islands, and Guam since 1993 (5). Puerto Rico, American Samoa, and the Northern Marianas do not collect this information. The percent of records for which Hispanic origin of the parents was not reported in 1999 is shown by State in [table I](#).

Marital status

National estimates of births to unmarried women are based on two methods of determining marital status. For 1994 through 1996, birth certificates in 45 states and the District of Columbia included a

Table I. Percent of birth records on which specified items were not stated: United States and each State and territory, 1999—Con.

[By place of residence]

Area	All births	Place of birth	Attendant at birth	Mother's birth-place	Father's age	Father's race	Hispanic origin		Educational attainment of mother	Live-birth order	Length of gestation	Month prenatal care began	Number of prenatal visits
							Mother	Father					
South Carolina	54,948	0.0	0.0	0.3	28.0	28.0	0.1	28.0	4.5	0.1	0.2	1.5	1.7
South Dakota	10,524	0.0	—	0.0	12.7	12.8	0.1	13.1	0.2	0.0	0.0	0.2	0.3
Tennessee	77,803	—	0.0	0.1	15.8	16.0	0.0	16.1	0.2	0.2	0.3	1.4	1.1
Texas	349,245	0.0	0.0	0.4	15.2	15.3	0.4	15.3	1.7	1.3	0.7	2.1	5.8
Utah	46,290	0.0	0.0	0.2	8.7	9.6	0.2	9.0	1.0	0.4	0.1	4.9	5.6
Vermont	6,567	—	—	0.1	9.1	14.8	2.2	16.1	2.6	0.5	0.1	4.1	2.0
Virginia	95,469	—	0.1	0.1	17.8	19.1	0.2	17.8	0.7	0.0	0.1	0.3	0.5
Washington	79,586	0.0	0.2	0.4	10.0	13.8	4.4	15.1	10.1	3.7	2.2	9.5	13.8
West Virginia	20,728	0.2	0.0	0.1	12.6	13.4	0.2	13.4	0.8	0.1	0.4	4.5	3.3
Wisconsin	68,208	—	0.0	0.1	28.8	28.8	0.0	28.8	0.2	0.0	0.0	0.2	0.3
Wyoming	6,129	—	—	0.0	14.2	14.8	0.0	14.3	0.5	0.0	0.0	0.7	1.1
Puerto Rico	59,563	—	0.1	—	3.0	3.8	—	—	0.4	0.0	0.1	0.4	0.1
Virgin Islands	1,671	—	0.1	—	24.8	26.5	4.4	27.5	2.6	0.6	1.1	0.7	2.9
Guam	4,021	0.0	1.0	0.4	22.9	23.9	1.2	25.4	0.6	1.0	0.3	0.5	0.9
American Samoa	1,736	0.1	—	36.6	35.5	35.8	—	—	—	—	—	—	—
Commonwealth of the Northern Marianas Islands	1,381	0.1	0.2	0.1	6.4	8.5	—	—	15.1	14.4	12.5	15.5	13.3

See footnotes at end of table.

question about the mother's marital status. Beginning in 1997, the marital status of women giving birth in California and Nevada is determined by a direct question in the birth registration process. Beginning June 15, 1998, Connecticut discontinued inferring the mother's marital status and added a direct question on mother's marital status to the State's birth certificate.

In the two States (Michigan and New York) that use inferential procedures to compile birth statistics by marital status in 1999, a birth is inferred as nonmarital if either of these factors, listed in priority-of-use order, is present: a paternity acknowledgment was received or the father's name is missing. In recent years, a number of States have extended their efforts to identify the fathers when the parents are not married in order to enforce child support obligations. The presence of a paternity acknowledgment therefore is the most reliable indicator that the birth is nonmarital in the States not reporting this information directly; this is now the key indicator in the nonreporting States. The inferential procedures in effect since 1980 represent a substantial departure from the method used before 1980 to prepare national estimates of births to unmarried women, which assumed that the incidence of births to unmarried women in States with no direct question on marital status was the same as the incidence in reporting States in the same geographic division (24, 94).

Because of the continued substantial increases in nonmarital childbearing throughout the 1980's and early 1990's, along with the changes in reporting procedures throughout the last two decades, the data have been intensively evaluated by the Division of Vital Statistics, NCHS. The results of this evaluation show that trends in birth rates for unmarried women computed on the basis of estimated data and on the basis of inferred data are essentially the same. Details of the changes in reporting procedures are described in previous reports (24, 94).

The mother's marital status was not reported in 1999 on 0.03 percent of the birth records in the 48 States and the District of Columbia where this information is obtained by a direct question. Marital status was imputed as "married" for these records.

Tobacco use

Beginning in 1999, data on whether or not the mother smoked during pregnancy is available for the District of Columbia and all States except for California and South Dakota. These areas comprised 87 percent of U.S. births in 1999. Data on the number of cigarettes smoked daily were available in a comparable format for 46 States, the District of Columbia, and New York City. Indiana and New York State (except for New York City) reported information on number of cigarettes smoked in a format that was inconsistent with the NCHS standard (see [figure 1](#)). The areas reporting on the number of cigarettes smoked comprised 82 percent of U.S. births in 1999.

Prenatal care

As a result of a programming error, the proportions presented in "Report of Final Natality Statistics, 1996" and "Births: Final Data for 1997" for the Adequacy of Prenatal Care Utilization Index (APNCU) are incorrect for levels of care other than intensive use of care (19, 20, 95). Levels for the adequate care category are only slightly different from those published previously. The corrected APNCU levels for 1990 and 1995-97 are presented in this report.

Gestation

The primary measure used to determine the gestational age of the newborn is the interval between the first day of the mother's last normal menstrual period (LMP) and the date of birth. It is subject to error for several reasons, including imperfect maternal recall or misidentification of the LMP because of postconception bleeding, delayed ovulation, or intervening early miscarriage. These data are edited for LMP-based gestational ages that are clearly inconsistent with the infant's plurality and birthweight (see below), but reporting problems for this item persist and may occur more frequently among some subpopulations and among births with shorter gestations (96, 97).

The U.S. Standard Certificate of Live Birth includes an item, "clinical estimate of gestation," that is being compared with length of gestation computed from the date the last normal menstrual period (LMP) began when the latter appears to be inconsistent with birthweight. This is done for normal weight births of apparently short gestations and very low birthweight births reported to be full term. The clinical estimate was also used if the LMP date was not reported. The period of gestation for 5.1 percent of the births in 1999 was based on the clinical estimate of gestation. For 97 percent of these records, the clinical estimate was used because the LMP date was not reported. For the remaining 3 percent, the clinical estimate was used because it was compatible with the reported birthweight, whereas the LMP-based gestation was not. In cases where the reported birthweight was inconsistent with both the LMP-computed gestation and the clinical estimate of gestation, the LMP-computed gestation was used, and birthweight was reclassified as "not stated." This was necessary for fewer than 350 births or less than 0.01 percent of all birth records in 1999. The levels of the adjustments in 1999 data were similar to those for 1998 and earlier years (21).

Birthweight

Birthweight is reported in some areas in pounds and ounces rather than in grams. However, the metric system has been used in tabulating and presenting the statistics to facilitate comparison with data published by other groups. Equivalents of the gram weights in terms of pounds and ounces are as follows:

Less than 500 grams	= 1 lb, 1 oz or less
500-999 grams	= 1 lb 2 oz-2 lb 3 oz
1,000-1,499 grams	= 2 lb 4 oz-3 lb 4 oz
1,500-1,999 grams	= 3 lb 5 oz-4 lb 6 oz
2,000-2,499 grams	= 4 lb 7 oz-5 lb 8 oz
2,500-2,999 grams	= 5 lb 9 oz-6 lb 9 oz
3,000-3,499 grams	= 6 lb 10 oz-7 lb 11 oz
3,500-3,999 grams	= 7 lb 12 oz-8 lb 13 oz
4,000-4,499 grams	= 8 lb 14 oz-9 lb 14 oz
4,500-4,999 grams	= 9 lb 15 oz-11 lb 0 oz
5,000 grams or more	= 11 lb 1 oz or more

Method of delivery

Several rates are computed for method of delivery. The overall cesarean section rate or *total cesarean* rate is computed as the percent of all births that were delivered by cesarean section. The *primary cesarean* rate is a measure that relates the number of women having a first cesarean delivery to all women giving birth who

Assisted ventilation (30 minutes or more)—Newborn placed on assisted ventilation for 30 minutes or longer.

Seizures—A seizure of any etiology.

Congenital anomalies of child

Anencephalus—Absence of the cerebral hemispheres.

Spina bifida/meningocele—Developmental anomaly characterized by defective closure of the bony encasement of the spinal cord, through which the cord and meninges may or may not protrude.

Hydrocephalus—Excessive accumulation of cerebrospinal fluid within the ventricles of the brain with consequent enlargement of the cranium.

Microcephalus—A significantly small head.

Other central nervous system anomalies—Other specified anomalies of the brain, spinal cord, and nervous system.

Heart malformations—Congenital anomalies of the heart.

Other circulatory/respiratory anomalies—Other specified anomalies of the circulatory and respiratory systems.

Rectal atresia/stenosis—Congenital absence, closure, or narrowing of the rectum.

Tracheo-esophageal fistula/Esophageal atresia—An abnormal passage between the trachea and the esophagus; esophageal atresia is the congenital absence or closure of the esophagus.

Omphalocele/Gastroschisis—An omphalocele is a protrusion of variable amounts of abdominal viscera from a midline defect at the base of the umbilicus. In gastroschisis, the abdominal viscera protrude through an abdominal wall defect, usually on the right side of the umbilical cord insertion.

Other gastrointestinal anomalies—Other specified congenital anomalies of the gastrointestinal system.

Malformed genitalia—Congenital anomalies of the reproductive organs.

Renal agenesis—One or both kidneys are completely absent.

Other urogenital anomalies—Other specified congenital anomalies of the organs concerned in the production and excretion of urine, together with organs of reproduction.

Cleft lip/palate—Cleft lip is a fissure or elongated opening of the lip; cleft palate is a fissure in the roof of the mouth. These are failures of embryonic development.

Polydactyly/syndactyly/adactyly—Polydactyly is the presence of more than five digits on either hands and/or feet; syndactyly is having fused or webbed fingers and/or toes; adactyly is the absence of fingers and/or toes.

Club foot—Deformities of the foot, which is twisted out of shape or position.

Diaphragmatic hernia—Herniation of the abdominal contents through the diaphragm into the thoracic cavity usually resulting in respiratory distress.

Other musculoskeletal/integumental anomalies—Other specified congenital anomalies of the muscles, skeleton, or skin.

Down's syndrome—The most common chromosomal defect with most cases resulting from an extra chromosome (trisomy 21).

Other chromosomal anomalies—All other chromosomal aberrations.

Related reports

Many of the topics discussed in this report are covered in more analytic detail in other reports published by NCHS. Topics of reports published in the past 5 years include Hispanic origin births (5); twin and triplet births (70, 83); teenage birth rates by State (7); birth rates by educational attainment of the mother (102); cesarean deliveries, attendant at birth, place of delivery, and obstetric procedures (61, 103); births to unmarried mothers (24); trends in pregnancies and pregnancy rates (8); and trends in smoking (37).

This report presents summary tabulations from the final natality statistics for 1999. The National Center for Health Statistics will respond to requests for unpublished data whenever possible.

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Suggested citation

Ventura SJ, Martin JA, Curtin SC, Menacker F, Hamilton BE. Births: Final data for 1999. National vital statistics reports; vol 49 no. 1. Hyattsville, Maryland: National Center for Health Statistics. 2001.

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DHHS Publication No. (PHS) 2001-1120
1-0208 (4/2001)

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